Discovery K12, Inc. **Quiz/Test Answers Sixth Grade** **discoveryk12.com**

Course: Math 6

Week 1 Quiz (Day 1 - Day 4):

Question 1: What is the ratio of 3 apples to 4 bananas?
a) 3:7
b) 3:4
c) 4:3
d) 7:3

Question 2: If a recipe calls for 2 cups of flour and 1 cup of sugar, what is the ratio of flour to sugar?
a) 1:2
b) 2:1
c) 3:1
d) 1:3

Question 3: A recipe for pancakes calls for 1 cup of flour and 2 eggs. What is the ratio of flour to eggs in the recipe?
a) 2:1
b) 1:2
c) 1:1
d) 3:2

Question 4: If it takes 4 cups of flour to make a cake, how many cups of flour do you need to make 7 cakes?
a) 7 cups
b) 14 cups
c) 21 cups
d) 28 cups

Question 5: If it takes 5 cups of sugar to make a pie, how many cups of sugar do you need to make 6 pies?
a) 10 cups
b) 20 cups
c) 30 cups
d) 40 cups

Question 6: If it takes 3 cups of milk to make a pancake, how many cups of milk do you need to make 8 pancakes?
a) 8 cups
b) 16 cups
c) 24 cups
d) 32 cups

Question 7: If it takes 6 cups of oil to fry a chicken, how many cups of oil do you need to fry 9 chickens?
a) 9 cups
b) 18 cups
c) 27 cups
d) 54 cups

Question 8:
If it takes 7 cups of butter to bake a loaf of bread, how many cups of butter do you need to bake 5 loaves of bread?
a) 5 cups
b) 15 cups
c) 25 cups
d) 35 cups

Question 9: If it takes 8 cups of cheese to make a pizza, how many cups of cheese do you need to make 4 pizzas?
a) 8 cups
b) 16 cups
c) 24 cups
d) 32 cups

Answers:

1. c) 4:3
2. b) 2:1
3. b) 1:2
4. d) 28 cups
5. c) 30 cups
6. c) 24 cups
7. d) 54 cups
8. d) 35 cups
9. d) 32 cups

Week 2 Quiz (Day 5 - Day 9):

Question 1: To make a punch, you need 4 cups of apple juice for every 2 cups of grape juice. If you have 16 cups of apple juice, how many cups of grape juice do you need?
a) 8 cups
b) 4 cups
c) 12 cups
d) 16 cups

Question 2: To make a smoothie, you need 3 cups of strawberries for every 2 cups of bananas. If you have 9 cups of strawberries, how many cups of bananas do you need?
a) 3 cups
b) 6 cups
c) 9 cups
d) 12 cups

Question 3: To make a salad, you need 5 cups of lettuce for every 3 cups of tomatoes. If you have 20 cups of lettuce, how many cups of tomatoes do you need?
a) 8 cups
b) 16 cups
c) 12 cups
d) 20 cups

Question 4: To make a soup, you need 7 cups of water for every 2 cups of noodles. If you have 21 cups of water, how many cups of noodles do you need?
a) 4 cups
b) 6 cups
c) 8 cups
d) 10 cups

Question 5: To make a cake, you need 6 cups of flour for every 3 cups of sugar. If you have 18 cups of flour, how many cups of sugar do you need?
a) 6 cups
b) 9 cups
c) 12 cups
d) 15 cups

Question 6: To make a pie, you need 5 cups of apples for every 2 cups of cherries. If you have 15 cups of apples, how many cups of cherries do you need?
a) 4 cups
b) 10 cups
c) 8 cups
d) 6 cups

Question 7: To make a sandwich, you need 4 slices of bread for every 2 slices of cheese. If you have 16 slices of bread, how many slices of cheese do you need?
a) 4 slices
b) 8 slices
c) 12 slices
d) 16 slices

Question 8: To make a pizza, you need 7 cups of dough for every 3 cups of cheese. If you have 21 cups of dough, how many cups of cheese do you need?
a) 6 cups
b) 9 cups
c) 12 cups
d) 15 cups

Question 9: To make a milkshake, you need 8 cups of milk for every 4 cups of ice cream. If you have 24 cups of milk, how many cups of ice cream do you need?
a) 8 cups
b) 12 cups
c) 16 cups
d) 20 cups

Question 10: To make a lemonade, you need 6 cups of lemon juice for every 3 cups of sugar. If you have 18 cups of lemon juice, how many cups of sugar do you need?
a) 9 cups
b) 6 cups
c) 12 cups
d) 15 cups

Answer Key:

1. a) 8 cups
2. b) 6 cups
3. c) 12 cups
4. b) 6 cups
5. b) 9 cups
6. d) 6 cups
7. b) 8 slices
8. b) 9 cups
9. b) 12 cups
10. a) 9 cups

Week 3 Quiz (Day 10 - Day 14)

Question 1. What is 25% off of $60?
a. $15
b. $30
c. $45
d. $20

Question 2. What is 30% off of $80?
a. $24
b. $30
c. $56
d. $26

Question 3. What is 20% off of $100?
a. $20
b. $30
c. $80
d. $90

Question 4. What is 10% off of $50?
a. $5
b. $10
c. $45
d. $40

Question 5. What is 15% off of $120?
a. $18

b. $20
c. $102
d. $108

Question 6. What is 50% off of $200?
a. $100
b. $150
c. $50
d. $200

Question 7. What is 40% off of $150?
a. $60
b. $90
c. $110
d. $50

Question 8. What is 35% off of $120?
a. $42
b. $35
c. $78
d. $85

Question 9. What is 45% off of $180?
a. $81
b. $99
c. $45
d. $90

Question 10. What is 55% off of $220?
a. $99
b. $121
c. $55
d. $110

Answer Key:
1. C. $45.
2. C. $56.
3. C. $80.
4. C. $45.
5. C. $102.
6. A. $100.
7. B. $90.
8. C. $78.
9. B. $99.
10. A. $99.

Week 4 Quiz (Day 15 - Day 19)

Question 1: What is the result of 3/5 divided by 1/10?
a) 3
b) 4
c) 6
d) 8

Question 2: What is the result of 1/5 divided by 1/10?
a) 1
b) 2
c) 3
d) 4

Question 3: What is the result of 5/5 divided by 3/10?
a) 10/2
b) 10/3
c) 20
d) 25

Question 4: What is the result of 2/5 divided by 1/10?
a) 2
b) 4
c) 6
d) 8

Question 5: What is the result of 1/5 divided by 1/10?
a) 2
b) 4
c) 6
d) 8

Question 6: What is the result of 6/5 divided by 2/10?
a) 6
b) 12
c) 18
d) 24

Question 7: What is the result of 7/5 divided by 3/10?
a) 7
b) 14/3
c) 21
d) 28

Question 8: What is the result of 8/5 divided by 4/10?
a) 4
b) 8
c) 12
d) 16

Question 9: What is the result of 9/5 divided by 5/10?
a) 9
b) 18/5
c) 27
d) 36

Question 10: What is the result of 10/5 divided by 6/10?
a) 10/5
b) 10/3
c) 15
d) 20

Answer Key:

1. c) 6
2. b) 2
3. b) 10/3
4. b) 4
5. a) 2
6. a) 6
7. b) 14/3
8. a) 4
9. b) 18/5
10. b) 10/3

Week 5 Quiz (Day 20 - Day 24)

Question 1: What is the product of 4532 and 23?
a) 104236
b) 103736
c) 105236
d) 102736

Question 2: What is the product of 2345 and 67?
a) 157015
b) 157115
c) 156915
d) 157215

Question 3: What is the product of 3456 and 89?
a) 307584
b) 308584
c) 306584
d) 309584

Question 4: What is the product of 6543 and 21?
a) 137503
b) 137403

c) 137303
d) 137603

Question 5: What is the product of 7654 and 32?
a) 244928
b) 245028
c) 244828
d) 245128

Question 6: What is the product of 1234 and 56?
a) 69104
b) 69204
c) 69004
d) 69304

Question 7: What is the product of 4321 and 78?
a) 336938
b) 337138
c) 337038
d) 337238

Question 8: What is the product of 5678 and 91?
a) 516698
b) 516798
c) 516598
d) 516898

Question 9: What is the product of 8765 and 32?
a) 280480
b) 280580
c) 280380
d) 280680

Question 10: What is the product of 3456 and 87?
a) 300872
b) 300772
c) 300572
d) 300672

Answer Key:

1. a) 104236
2. b) 157115
3. a) 307584
4. a) 137403
5. a) 244928
6. a) 69104
7. a) 337038
8. a) 516698

9. a) 280480
10. a) 300672

Week 6 Quiz (Day 25 - Day 29)

Question 1. What is the sum of 581.27 and 0.0021?
a) 581.27
b) 581.271
c) 581.2721
d) 581.3

Question 2. What is the sum of 456.789 and 321.123?
a) 777.9
b) 777.91
c) 777.912
d) 778

Question 3. What is the sum of 123.456 and 0.6543?
a) 123.456
b) 124.1103
c) 123.4567
d) 123.457

Question 4. What is the sum of 789.123 and 0.321?
a) 789.123
b) 789.1234
c) 789.444
d) 789.124

Question 5. What is the sum of 321.654 and 0.9876?
a) 321.654
b) 321.6547
c) 322.6416
d) 321.655

Question 6. What is the sum of 654.321 and 0.1234?
a) 654.4444
b) 654.3214
c) 654.321
d) 654.322

Question 7. What is the sum of 987.654 and 0.321?
a) 987.654
b) 987.6543
c) 987.975
d) 987.655

Question 8. What is the sum of 123.789 and 0.456?
a) 123.789

b) 123.7894
c) 124.245
d) 123.79

Question 9. What is the sum of 456.123 and 0.789?
a) 456.123
b) 456.1237
c) 456.912
d) 456.124

Question 10. What is the sum of 789.456 and 0.123?
a) 789.456
b) 789.579
c) 789.4562
d) 789.457

Answer Key:

1. c) 581.2721
2. c) 777.912
3. b) 124.1103
4. c) 789.444
5. c) 322.6416
6. a) 654.4444
7. c) 987.975
8. c) 124.245
9. c) 456.912
10. b) 789.579

Week 7 Quiz (Day 30 - Day 34)

Question 1: What is the sum of 1.234 and 2.345?
A) 3.579
B) 3.569
C) 3.559
D) 3.549

Question 2: What is the sum of 3.456 and 2.345?
A) 5.801
B) 5.8010
C) 5.8011
D) 5.802

Question 3: What is the sum of 0.0231 and 0.0456?
A) 0.0587
B) 0.0687
C) 0.0787
D) 0.0887

Question 4: What is the sum of 3.4567 and 4.5678?
A) 7.0135
B) 8.0245
C) 7.0355
D) 7.0465

Question 5: What is the difference between 782.431 and 645.809?
A) 136.622
B) 136.621
C) 136.512
D) 136.415

Question 6: What is the difference between 921.567 and 801.345?
A) 120.221
B) 120.212
C) 120.232
D) None of the above

Question 7: What is the difference between 7824.431 and 6458.809?
A) 1365.622
B) 1365.6220
C) 1365.6211
D) 1365.6222

Question 8: What is the difference between 9215.567 and 8013.345?
A) 1202.223
B) 1202.212
C) 1202.232

D) None of the above
Question 9: What is the difference between 800.002 and 699.998?
A) 100.004
B) 99.994
C) 100.008
D) 99.992

Question 10: What is the difference between 409.005 and 398.005?
A) 11.000
B) 10.000
C) 9.000
D) 12.000

Answers:

Question 1: A) 3.579
Question 2: A) 5.801
Question 3: B) 0.0687
Question 4: B) 8.0245
Question 5: A) 136.622

Question 6: D) None of the above (120.222)
Question 7: D) 1365.6222
Question 8: D) None of the above (1202.222)
Question 9: A) 100.004
Question 10: A) 11.000

Week 8 Quiz (Day 35 - Day 39)

Question 1: What is the difference between 16572.44 and 12568.89?
A) 4003.55
B) 4013.5500
C) 4013.5400
D) 4013.5600

Question 2: What is the difference between 10791.08 and 7082.09?
A) 3718.99
B) 3708.99
C) 3728.99
D) 3738.99

Question 3: What is the result of (-9) ÷ (-3)?
A) 3
B) -3
C) 27
D) -27

Question 4: What is the result of 24 ÷ (-4)?
A) 6
B) -6
C) 8
D) -8

Question 5: What is the result of (-5) x 6?
A) 30
B) -30
C) 11
D) -11

Question 6: What is the result of 24 ÷ (-8)?
A) 3
B) -3
C) 8
D) -8

Question 7: What is the result of (-15) - (-9)?
A) -6
B) 6
C) 24
D) -24

Question 8: What is the result of 18 - (-3)?
A) -15
B) 15
C) -21
D) None of the above

Question 9: What is the result of (-6) x (-4)?
A) -10
B) 10
C) 24
D) -24

Question 10: What is the result of 20 x (-5)?
A) 100
B) -25
C) 25
D) None of the above

Answers:

Question 1: A) 4003.55
Question 2: B) 3708.99
Question 3: A) 3
Question 4: B) -6
Question 5: B) -30
Question 6: B) -3
Question 7: A) -6
Question 8: D) None of the above (Answer: 21)
Question 9: C) 24
Question 10: D) None of the above (Answer: -100)

Week 9 Quiz (Day 40 - Day 44)

Question 1: The __ - axis is vertical in the coordinate plane.
A) X
B) Y
C) Z
D) None of the above

Question 2: In which quadrant is the ordered pair (-1, -4) located?
A. First
B. Second
C. Third
D. Fourth

Question 3: What is the ordered pair for the origin on the coordinate plane?
A) (0,1)
B) (1,1)
C) (-1, -1)

D) (0,0)

Question 4: In which quadrant is the ordered pair (-3, 2) located?
A. First
B. Second
C. Third
D. Fourth

Question 5: In which quadrant is the ordered pair (0, 6) located?
A. First
B. Second
C. Third
D. None of the above

Question 6: The x axis is _____

A) Vertical
B) Diagonal
C) Horizontal
D) None of the above

Question 7: In which quadrant is the ordered pair (5 , 6) located?
A. First
B. Second
C. Third
D. Fourth

Question 8: How is an ordered pair arranged?
A) (X, X)
B) (Y , Y)
C) (Y,X)
D) None of the above

Question 9: In which quadrant is the ordered pair (2 , -7) located?
A. First
B. Second
C. Third
D. Fourth

Question 10: What is the name of the plane that we graph on?
A) Geometric plane
B) Grid plane
C) Coordinate plane
D) Operational plane

Answers:

Question 1: B) Y
Question 2: C) Third

Question 3: D) (0,0)
Question 4: B) Second
Question 5: D) None of the above (on positive y-axis)
Question 6: C) Horizontal
Question 7: A) First
Question 8: D) None of the above (X,Y)
Question 9: D) Fourth
Question 10: C) Coordinate plane

Week 10 Quiz (Day 45 - Day 48)

Question 1: In which quadrant is the ordered pair (3, 0) located?
A. First
B. Second
C. Third
D. None of the above

Question 2: Which quadrant has x and y values that are both negative?
A. First
B. Second
C. C) Third
D. D) Fourth

Question 3: In which quadrant is the ordered pair (-8, -8) located?
A. First
B. Second
C. Third
D. Fourth

Question 4: Which quadrant has a positive x value but a negative y value?
A. First
B. Second
C. Third
D. Fourth

Question 5: In which quadrant is the ordered pair (-10, 1) located?
A. First
B. Second
C. Third
D. Fourth

Question 6: The coordinate plane is created by two number lines that are ____ .
A) Perpendicular
B) Intersect at right angles
C) All of the above
D) None of the above

Question 7: In which quadrant is the ordered pair (11 , 5) located?
A. First

B. Second
C. Third
D. Fourth
E.
Question 8: The y axis is _____
A. Horizontal
B. Diagonal
C. Vertical
D. None of the above

Question 9: In which quadrant is the ordered pair (0, -6) located?
A. First
B. Second
C. C) Third
D. D) None of the above

Question 10: A plane divides the space into quadrants that are labeled ____?
A. Clockwise
B. Geometric
C. Counter Clockwise
D. None of the above

Answers:

Question 1: D) None of the above (on positive X-axis)
Question 2: C) Third
Question 3: C) Third
Question 4: D) Fourth
Question 5: B) Second
Question 6: C) All of the above
Question 7: A) First
Question 8: C) Vertical
Question 9: D) None of the above (on negative Y-axis)
Question 10: C) Counter Clockwise

Week 11 Quiz (Day 49 - Day 53)

Question 1. Which ordered pair represents the point located 3 units to the right and 2 units up from the origin?
a) (2, 3)
b) (3, 2)
c) (-3, -2)
d) (-2, -3)

Question 2. Which quadrant is the point (5, -4) located in?
a) Quadrant I
b) Quadrant II
c) Quadrant III
d) Quadrant IV

Question 3. Which ordered pair represents the origin?
a) (0, 0)
b) (1, 1)
c) (-1, -1)
d) (1, 0)

Question 4. If a point is in Quadrant II, which of the following could be its x-coordinate?
a) 3
b) 0
c) -4
d) 5

Question 5. Which ordered pair represents a point on the y-axis?
a) (0, 5)
b) (5, 0)
c) (3, 3)
d) (-4, 4)

Question 6. Which quadrant is the point (-3, 4) located in?
a) Quadrant I
b) Quadrant II
c) Quadrant III
d) Quadrant IV

Question 7. Which ordered pair represents a point on the x-axis?
a) (0, -6)
b) (-6, 0)
c) (6, 6)
d) (0, 6)

Question 8. If a point is in Quadrant III, which of the following could be its y-coordinate?
a) 2
b) -2
c) 0
d) 3

Question 9. Which quadrant is the point (0, 0) located in?
a) Quadrant I
b) Quadrant II
c) Quadrant III
d) It's not in any quadrant.

Question 10. Which ordered pair represents the point located 4 units to the left and 3 units down from the origin?
a) (-4, 3)
b) (4, -3)
c) (-4, -3)
d) (3, -4)

Answer Key:

1. b) (3, 2)
2. d) Quadrant IV
3. a) (0, 0)
4. c) -4
5. a) (0, 5)
6. b) Quadrant II
7. b) (-6, 0)
8. b) -2
9. d) It's not in any quadrant.
10. c) (-4, -3)

Week 12 Quiz (Day 54 - Day 56)

Question 1: Which inequality represents the statement "x is greater than 3"?
A. $x < 3$
B. $x > 3$
C. $x \leq 3$
D. $x \geq 3$

Question 2: Which inequality represents the statement "y is less than or equal to 6"?
A. $y > 6$
B. $y < 6$
C. $y \geq 6$
D. $y \leq 6$

Question 3: Which inequality represents the statement "z is greater than or equal to -2"?
A. $z < -2$
B. $z > -2$
C. $z \leq -2$
D. $z \geq -2$

Question 4: Which inequality represents the statement "a is less than 10"?
A. $a > 10$
B. $a < 10$
C. $a \geq 10$
D. $a \leq 10$

Question 5: Which inequality represents the statement "b is less than 5"?
A. $b > 5$
B. $b < 5$
C. $b \geq 5$
D. $b \leq 5$

Question 6: Which inequality represents the statement "c is greater than or equal to 0"?
A. $c < 0$
B. $c > 0$

C. $c \leq 0$
D. $c \geq 0$

Question 7: Which inequality represents the statement "d is less than or equal to -8"?
A. $d > -8$
B. $d < -8$
C. $d \geq -8$
D. $d \leq -8$

Question 8: Which inequality represents the statement "e is greater than -3"?
A. $e < -3$
B. $e > -3$
C. $e \leq -3$
D. $e \geq -3$

Question 9: An inequality means____?
A. A plot
B. Mathematical sentence that compares quantities
C. All of the above
D. None of the above

Question 10: The graph of an inequality in two variables is the set of points that represents all solutions to the inequality.

A. True
B. False

Answers:

Question 1: B) $x > 3$
Question 2: D) $y \leq 6$
Question 3: D) $z \geq -2$
Question 4: B) $a < 10$
Question 5: B) $b < 5$
Question 6: D) $c \geq 0$
Question 7:D) $d \leq -8$
Question 8: B) $e > -3$
Question 9: C) All of the above
Question 10: A) True

Week 13 Quiz (Day 57 - Day 61)

Question 1: A _____ is a mathematical sentence in which the two sides are not equal and are separated with the symbols < , >, ≤ or ≥
A. Equation
B. Equality
C. Inequality
D. Expression

Question 2: Which inequality represents the statement "f is less than or equal to 10"? Graph the inequality.
A) $f > 10$
B) $f < 10$
C) $f \geq 10$
D) $f \leq 10$

Question 3: Which inequality represents the statement "g is greater than or equal to -5"?
A. $g < -5$
B. $g > -5$
C. $g \leq -5$
D. $g \geq -5$

Question 4: Which inequality represents the statement "x is greater than or equal to -2"?
A. $x < -2$
B. $x > -2$
C. $x \leq -2$
D. $x \geq -2$

Question 5: In the coordinate plane, the point located at (–2, 5) was reflected and is now located at (2, 5). Which statement describes how the point was reflected?

A. The point was reflected across the x-axis.
B. The point was reflected across the y-axis.
C. The point was reflected across the x-axis, then the y-axis.
D. The point was reflected across the y-axis, then the x-axis.

Question 6: What is the distance between the ordered pairs (3, 7) and (-2, 9)?
A. 2
B. 3
C. 5.39
D. 5

Question 7: In which quadrant is the ordered pair (5, -8) located?
A. Quadrant I
B. Quadrant II
C. Quadrant III
D. Quadrant IV

Question 8: In which quadrant is the ordered pair (0, -3) located?
A. Quadrant I
B. Quadrant II
C. Quadrant III
D. None of the above

Question 9: Which quadrant has X negative values and Y positive values?
A. First
B. Second

C) Third
D) Fourth

Question 10: In this ordered pair (7,1), 7 is on a ____ axis
A. Horizontal
B. Vertical
C. All of the above
D. None of the above

Question 1: C) Inequality
Question 2: D) $f \leq 10$
Question 3: D) $g \geq -5$
Question 4: D) $x \geq -2$
Question 5: B) The point was reflected across the y-axis.
Question 6: C) 5.39
Question 7: D) Quadrant IV
Question 8: D. None of the above
Question 9: B) Second
Question 10: A) Horizontal

Week 14 Quiz (Day 62 - Day 66)

Question 1: X-coordinate is the amount _____ from the origin.
A. Left or right from the origin
B. Up or down from the origin
C. All of the above
D. None of the above

Question 2: Y-coordinate is the amount _____ from the origin.
A. Left or right from the origin
B. Up or down from the origin
C. All of the above
D. None of the above

Question 3: Horizontal lines are _____ to the X-axis
A. Perpendicular
B. Parallel
C. Intersecting
D. None of the above

Question 4: The X-axis is _____ to the Y-axis
A. Perpendicular
B. Parallel
C. Intersecting
D. None of the above

Question 5: In the coordinate plane, the point located at (3, -6) was reflected and is now located at (3, 6). Which statement describes how the point was reflected?
A. The point was reflected across the x-axis.

B. The point was reflected across the y-axis.
C. The point was reflected across the x-axis, then the y-axis.
D. The point was reflected across the y-axis, then the x-axis.

Question 6: If the coordinate is on the X-axis, which quadrant does it belong to?
A. First
B. Second
C. All of the above
D. None of the above

Question 7: Which quadrant does the point (0,3) belong to?
A. Third
B. Fourth
C. All of the above
D. None of the above

Question 8: Which quadrant does the point (-5,-5) belong to?
A. First
B. Second
C. Third
D. Fourth

Question 9: In which quadrant is the ordered pair (-2, 7) located?
A. Quadrant I
B. Quadrant II
C. Quadrant III
D. Quadrant IV

Question 10: In which quadrant is the ordered pair (4, 0) located?
A. Quadrant I
B. Quadrant II
C. Quadrant III
D. Quadrant IV

Answers:

Question 1: A) Left or right from the origin
Question 2: B) Up or down from the origin
Question 3: B) Parallel
Question 4: A) Perpendicular
Question 5: B) The point was reflected across the y-axis.
Question 6: D) None of the above (on the X-axis)
Question 7: D) None of the above (on the Y-axis)
Question 8: C) Third
Question 9: B) Quadrant II
Question 10: A) Quadrant I

Week 15 Quiz (Day 67 - Day 71)

Question 1: Write an expression for "the sum of a number and four."
A. n + 4
B. n - 4
C. n/4
D. 4n

Question 2: Write an expression for "three times a number."
A. n/3
B. 3n
C. n + 3
D. n - 3

Question 3: Write an expression for "the difference between six times a number and ten."
A. 6n + 10
B. 6n - 10
C. n + 6
D. n - 6

Question 4: Write an expression for "twice the difference between a number and six."
A. 2n - 6
B. 2n + 6
C. n/2
D. 2n

Question 5: Write an expression for "the product of 7 and the difference between 20 and 10."
A. 7(20 - 10)
B. 7(20 + 10)
C. 7(10 - 20)
D. 7(10 + 20)

Question 6: Write an expression for "three times the sum of a number and 5."
A. 3n + 5
B. 3n - 5
C. n + 3
D. n - 3

Question 7: Write an expression for "the difference between the product of 9 and 7 and the sum of 25 and 6."
A. 9 x 7 - 25 + 6
B. 9 + 7 - 25 x 6
C. 9 - 7 - 25 + 6
D. 9 x 7 + 25 + 6

Question 8: Write an expression for "one-half the difference between 45 and 25."
A. (45 - 25)/2
B. (45 + 25)/2
C. (25 - 45)/2

D. (25 + 45)/2

Question 9: Your test has 100 points in total. You got an 80 percent on your first math test, and a 92 percent on your next math test. By how many points did your grade improve?
A. 10 points
B. 11 points
C. 12 points
D. 13 points

Question 10: Your aunt lives 244 miles from your house. You can take the train to visit her. If the train takes 4 hours to make the trip, what is the train's average miles per hour?
A. 60 mph
B. 61 mph
C. 62 mph
D. 63 mph

Answers:

Question 1: A) n + 4
Question 2: B) 3n
Question 3: B) 6n - 10
Question 4: A) 2(n – 6)
Question 5: A) 7(20 - 10)
Question 6: A) 3n + 5
Question 7: A) 9 x 7 - 25 + 6
Question 8: A) (45 - 25)/2
Question 9: C) 12 points
Question 10: B) 61 mph

Week 16

Question 1. Which expression represents "a number increased by 5"?
a) x + 5
b) x - 5
c) 5x
d) x/5

Question 2. How would you write "seven less than a number"?
a) 7 - x
b) x - 7
c) 7x
d) x/7

Question 3. Which expression represents "twice a number"?
a) 2x
b) x + 2
c) x - 2
d) x/2

Question 4. How would you express "a number divided by 3"?
a) x/3
b) 3x
c) x - 3
d) x + 3

Question 5. Which expression represents "a number decreased by 10"?
a) x - 10
b) 10 - x
c) 10x
d) x/10

Question 6. How would you write "three more than a number"?
a) x + 3
b) 3x
c) x - 3
d) 3/x

Question 7. Which expression represents "half of a number"?
a) x/2
b) 2x
c) x - 2
d) x + 2

Question 8. How would you express "a number multiplied by 4"?
a) 4x
b) x/4
c) x + 4
d) x - 4

Question 9. Which expression represents "a number added to itself"?
a) 2x
b) x + x
c) x/2
d) Both a and b

Question 10. How would you write "ten divided by a number"?
a) 10/x
b) x/10
c) 10x
d) x – 10

Answer Key:

1. a) x + 5
2. b) x - 7
3. a) 2x
4. a) x/3
5. a) x - 10

6. a) x + 3
7. a) x/2
8. a) 4x
9. d) Both a and b
10. a) 10/x

Week 17

Question 1. Juan is 4 inches taller than Niko. If N represents Niko’s height in inches, write an expression for Juan’s height.
a) N + 4
b) N - 4
c) 4N
d) N/4

Question 2. Maria has 5 more candies than John. If J represents the number of candies John has, how many candies does Maria have?
a) J + 5
b) 5J
c) J - 5
d) J/5

Question 3. Tom is twice as old as Jerry. If Y represents Jerry's age, how old is Tom?
a) 2Y
b) Y + 2
c) Y - 2
d) Y/2

Question 4. There are 3 times as many girls as boys in a class. If B represents the number of boys, how many girls are there?
a) B + 3
b) 3B
c) B - 3
d) B/3

Question 5. Sarah has 7 fewer books than David. If D represents the number of books David has, how many books does Sarah have?
a) D - 7
b) 7D
c) D + 7
d) D/7

Question 6. Mike's savings is 3 times less than Jake's. If J represents Jake's savings, how much does Mike have?
a) J/3
b) 3J
c) J - 3
d) J + 3

Question 7. Lisa is 6 years younger than Monica. If M represents Monica's age, how old is Lisa?
a) M - 6
b) 6M
c) M + 6
d) M/6

Question 8. There are 4 times as many apples as oranges in a basket. If A represents the number of oranges, how many apples are there?
a) 4A
b) A/4
c) A + 4
d) A - 4

Question 9. Peter's score is 10 points higher than Sam's. If S represents Sam's score, what is Peter's score?
a) S + 10
b) 10S
c) S - 10
d) S/10

Question 10. Emily has half as many pencils as Amy. If A represents the number of pencils Amy has, how many pencils does Emily have?
a) A + 2
b) 2A
c) A/2
d) A - 2

Answer Key:

1. a) N + 4
2. a) J + 5
3. a) 2Y
4. b) 3B
5. a) D - 7
6. a) J/3
7. a) M - 6
8. a) 4A
9. a) S + 10
10. c) A/2

Week 18

Question 1. If x = 5, what is the value of the expression x + 3?
a) 5
b) 8
c) 15
d) 9

Question 2. Given y = 4, what is y - 2?
a) 6
b) 3
c) 2
d) 1

Question 3. If a = 7, what is 3a?
a) 10
b) 21
c) 24
d) 3

Question 4. For b = 6, find the value of b/2.
a) 12
b) 3
c) 4
d) 8

Question 5. Given c = 8, what is c + c?
a) 16
b) 4
c) 64
d) 8

Question 6. If d = 9, what is d - 5?
a) 4
b) 14
c) 5
d) 45

Question 7. For e = 10, find the value of e/5.
a) 50
b) 2
c) 5
d) 15

Question 8. If f = 3, what is 4f?
a) 7
b) 12
c) 3
d) 15

Question 9. Given g = 2, what is g + g + g?
a) 2
b) 4
c) 6
d) 8

Question 10. If h = 4, what is 2h - 3?

a) 5
b) 8
c) 1
d) 7

Answer Key:

1. b) 8
2. c)
3. b) 21
4. b) 3
5. a) 16
6. a) 4
7. b) 2
8. b) 12
9. c) 6
10. a) 5

Week 19

Question 1. Which of the following expressions is equivalent to 3x + 2x?
a) 5x
b) 6x
c) x + 5
d) 5

Question 2. If two expressions are equivalent, they have the same:
a) Variables
b) Coefficients
c) Value
d) Constants

Question 3. Which term is a like term with 4y?
a) 5y
b) 4x
c) 4
d) y

Question 4. What is the first step in simplifying the expression 2x + 5 + 3x + 4?
a) Add the constants
b) Subtract the variables
c) Combine like terms
d) Multiply the coefficients

Question 5. Which of the following expressions is NOT equivalent to 7 + 3x?
a) 3x + 7
b) 10x
c) 7 + 2x + x
d) 10 + x

Question 6. In the expression 6z + 3, which part is the variable term?
a) 6
b) 3
c) z
d) 6z

Question 7. Which expression is simplified?
a) 5x + 3x
b) 8x
c) x + x + x + x + x + x + x + x
d) 5 + 3

Question 8. What do you get when you combine the like terms in 4a + 5 + 3a?
a) 7a + 5
b) 7a
c) 12a
d) 9a + 5

Question 9. Which of the following is a constant term in the expression 3x + 4y + 7?
a) 3x
b) 4y
c) 7
d) x

Question 10. If you simplify the expression 5b + 2 + 4b + 3, which term will NOT be present?
a) 9b
b) 5
c) b
d) 2b

Answer Key:

1. a) 5x
2. c) Value
3. a) 5y
4. c) Combine like terms
5. b) 10x
6. d) 6z
7. b) 8x
8. a) 7a + 5
9. c) 7
10. d) 2b

Week 20

Question 1. The distributive property involves which two operations?
a) Addition and subtraction
b) Multiplication and addition
c) Division and multiplication
d) Subtraction and division

Question 2. Which expression is equivalent to 3(x + 4) using the distributive property?
a) 3x + 4
b) 3x + 12
c) x + 12
d) 7x

Question 3. If you distribute 5 into the expression (5 + y), you get:
a) 5 + 5y
b) 10 + y
c) 10 + 5y
d) 5y

Question 4. The expression 4(2 + z) is equivalent to:
a) 8 + z
b) 6 + 4z
c) 8 + 4z
d) 4z

Question 5. Which of the following is NOT an application of the distributive property?
a) 6(3 + m) = 18 + 6m
b) 7(n + 2) = 7n + 14
c) 5(4 + p) = 20p
d) 3(5 + q) = 15 + 3q

Question 6. To determine if two expressions are equivalent using the distributive property, you should:
a) Distribute and then simplify
b) Add the coefficients
c) Multiply the variables
d) Combine like terms first

Question 7. Which expression is equivalent to 2(6 + y)?
a) 12 + y
b) 8 + 2y
c) 12 + 2y
d) 2y

Question 8. The distributive property states that a(b + c) is equivalent to:
a) ab + c
b) a + bc
c) ab + ac

d) a(b)c

Question 9. If you distribute 3 into the expression (7 + t), you get:
a) 21 + t
b) 10 + 3t
c) 21 + 3t
d) 3t

Question 10. Which of the following expressions is NOT equivalent to 4(3 + n)?
a) 12 + 4n
b) 7 + 4n
c) 12n
d) 12 + n

Answer Key:

1. b) Multiplication and addition
2. b) 3x + 12
3. a) 5 + 5y
4. c) 8 + 4z
5. c) 5(4 + p) = 20p
6. a) Distribute and then simplify
7. c) 12 + 2y
8. c) ab + ac
9. c) 21 + 3t
10. b) 7 + 4n

Week 21

Question 1. Which symbol represents "greater than"?
a) <
b) >
c) =
d) <=

Question 2. Which symbol represents "less than or equal to"?
a) <
b) >
c) =
d) <=

Question 3. If a number is not greater than 5, it must be:
a) Exactly 5
b) Less than 5
c) Greater than 5
d) 0

Question 4. Which of the following represents "a number is at most 10"?
a) x > 10

b) x < 10
c) x = 10
d) x <= 10

Question 5. If you flip the sides of an inequality, what should you do to the inequality sign?
a) Keep it the same
b) Flip it
c) Remove it
d) Replace it with an equal sign

Question 6. When solving an inequality, if you multiply or divide by a negative number, you must:
a) Add 1 to the result
b) Subtract 1 from the result
c) Flip the inequality sign
d) Do nothing to the inequality sign

Question 7. Which of the following represents "a number is at least 7"?
a) x > 7
b) x < 7
c) x = 7
d) x >= 7

Question 8. Which of the following is the correct way to read the inequality x > 4?
a) x is greater than 4
b) x is less than 4
c) x is equal to 4
d) x is at most 4

Question 9. Inequalities can have how many solutions?
a) Only one solution
b) Exactly two solutions
c) No solutions
d) One or many solutions

Question 10. Which of the following is NOT a solution to the inequality x > 3?
a) 2
b) 4
c) 5
d) 3.5

Answer Key:

1. b) >
2. d) <=
3. b) Less than 5
4. d) x <= 10
5. b) Flip it
6. c) Flip the inequality sign

7. d) x >= 7
8. a) x is greater than 4
9. d) One or many solutions
10. a) 2

Week 22

Question 1. If "a number" is represented by n, how would you represent "a number increased by 5"?
a) n + 5
b) n - 5
c) 5n
d) n/5

Question 2. How would you represent "twice a number"?
a) 2 + n
b) n - 2
c) 2n
d) n/2

Question 3. If "the total cost" is represented by c, how would you represent "the total cost decreased by 10"?
a) c + 10
b) c - 10
c) 10c
d) c/10

Question 4. How would you represent "three less than a number"?
a) n + 3
b) n - 3
c) 3n
d) n/3

Question 5. If "a number" is represented by x, how would you represent "half of a number"?
a) x + 2
b) x - 2
c) 2x
d) x/2

Question 6. How would you represent "seven more than twice a number"?
a) 2n + 7
b) 2n - 7
c) 7n
d) n/7

Question 7. If "the total number of books" is represented by b, how would you represent "the total number of books divided by 4"?
a) b + 4
b) b - 4

c) 4b
d) b/4

Question 8. How would you represent "a number decreased by 6"?
a) n + 6
b) n - 6
c) 6n
d) n/6

Question 9. If "the total distance" is represented by d, how would you represent "the total distance minus 5"?
a) d + 5
b) d - 5
c) 5d
d) d/5

Question 10. How would you represent "four times a number"?
a) n + 4
b) n - 4
c) 4n
d) n/4

Answer Key:

1. a) n + 5
2. c) 2n
3. b) c - 10
4. b) n - 3
5. d) x/2
6. a) 2n + 7
7. d) b/4
8. b) n - 6
9. b) d - 5
10. c) 4n

Week 23

Question 1. What is the first step in solving the equation "x + 5 = 10"?
a) Subtract 10 from each side
b) Add 5 to each side
c) Subtract 5 from each side
d) Multiply each side by 5

Question 2. If you have the equation "x - 3 = 7", what operation should you use to solve for x?
a) Addition
b) Subtraction
c) Multiplication
d) Division

Question 3. Which equation represents "a number decreased by 4 is 12"?
a) x + 4 = 12
b) x - 4 = 12
c) 4x = 12
d) x/4 = 12

Question 4. What is the solution to the equation "x + 0 = x"?
a) 0
b) 1
c) Any number
d) Cannot be determined

Question 5. If you want to solve the equation "3x = 12", what should you do?
a) Add 3 to each side
b) Subtract 3 from each side
c) Multiply each side by 3
d) Divide each side by 3

Question 6. Which of the following is a correct equation for "twice a number is 14"?
a) 2 + x = 14
b) x - 2 = 14
c) 2x = 14
d) x/2 = 14

Question 7. In the equation "x/5 = 3", what operation will help you solve for x?
a) Addition
b) Subtraction
c) Multiplication
d) Division

Question 8. Which equation represents "half of a number is 8"?
a) x + 2 = 8
b) x - 2 = 8
c) 2x = 8
d) x/2 = 8

Question 9. If you have the equation "x + 7 = 15", what is the inverse operation to solve for x?
a) Addition
b) Subtraction
c) Multiplication
d) Division

Question 10. Which of the following equations has a solution of x = 5?
a) x + 5 = 10
b) x - 5 = 10
c) 5x = 10
d) x/5 = 10

Answer Key:

1. c) Subtract 5 from each side
2. a) Addition
3. b) x - 4 = 12
4. c) Any number
5. d) Divide each side by 3
6. c) 2x = 14
7. c) Multiplication
8. d) x/2 = 8
9. b) Subtraction
10. a) x + 5 = 10

Week 24

Question 1. To solve the equation "3x = 12", you should:
a) Add 3 to both sides
b) Subtract 3 from both sides
c) Multiply both sides by 3
d) Divide both sides by 3
Question 2. If you have the equation "x/4 = 5", what operation should you use to solve for x?
a) Addition
b) Subtraction
c) Multiplication
d) Division

Question 3. Which of the following equations represents "a number divided by 6 is 7"?
a) x + 6 = 7
b) x - 6 = 7
c) 6x = 7
d) x/6 = 7

Question 4. To solve for x in the equation "5x = 25", you should:
a) Add 5 to both sides
b) Subtract 5 from both sides
c) Multiply both sides by 5
d) Divide both sides by 5

Question 5. Which equation represents "a number multiplied by 8 is 48"?
a) x + 8 = 48
b) x - 8 = 48
c) 8x = 48
d) x/8 = 48

Question 6. In the equation "x/9 = 3", what should you do to solve for x?
a) Add 9 to both sides
b) Subtract 9 from both sides
c) Multiply both sides by 9

d) Divide both sides by 3

Question 7. Which of the following equations has a solution of x = 20?
a) x/4 = 5
b) 4x = 80
c) x - 4 = 16
d) 4x = 5

Question 8. To solve the equation "x/5 = 10", you should:
a) Add 5 to both sides
b) Subtract 5 from both sides
c) Multiply both sides by 5
d) Divide both sides by 10

Question 9. Which equation represents "a number divided by 7 is 9"?
a) x + 7 = 9
b) 7x = 9
c) x - 7 = 9
d) x/7 = 9

Question 10. To solve for x in the equation "6x = 42", you should:
a) Add 6 to both sides
b) Subtract 6 from both sides
c) Multiply both sides by 6
d) Divide both sides by 6

Answer Key:

1. d) Divide both sides by 3
2. c) Multiplication
3. d) x/6 = 7
4. d) Divide both sides by 5
5. a) 8x = 48
6. c) Multiply both sides by 9
7. b) x/4 = 5
8. c) Multiply both sides by 5
9. d) x/7 = 9
10. d) Divide both sides by 6

Week 25

Question 1. The Distributive Property allows you to:
a) Combine like terms
b) Multiply numbers inside and outside parentheses
c) Subtract numbers inside and outside parentheses
d) Divide numbers inside and outside parentheses

Question 2. Which expression demonstrates the Distributive Property?
a) a + (b + c)

b) a(b - c)
c) a(b + c)
d) a - (b + c)

Question 3. The Distributive Property states that:
a) a + (b + c) = ab + ac
b) a(b - c) = ab - ac
c) a(b + c) = ab + ac
d) a - (b + c) = ab – ac

Question 4. If you distribute 3 into (x + 2), which of the following is correct?
a) 3x + 2
b) 3x + 6
c) x + 6
d) 3x – 6

Question 5. The Distributive Property is useful when:
a) Solving for x in an equation
b) Multiplying numbers in parentheses by a number outside
c) Adding numbers inside parentheses
d) Dividing numbers inside and outside parentheses

Question 6. Which expression is equivalent to 4(y + 7) using the Distributive Property?
a) 4y + 28
b) 4y + 7
c) 11y
d) 28y

Question 7. The Distributive Property can be used with:
a) Only addition
b) Only subtraction
c) Both addition and subtraction
d) Neither addition nor subtraction

Question 8. Distributing -5 into (-x + 3) gives:
a) -5x + 15
b) 5x - 15
c) 5x + 15
d) -5x – 15

Question 9. The Distributive Property helps to simplify expressions by:
a) Eliminating parentheses
b) Combining like terms
c) Factoring out common terms
d) Adding coefficients

Question 10. Which of the following is NOT an application of the Distributive Property?
a) 2(3 + 4) = 6 + 8
b) 5(x - 1) = 5x - 5

c) 3(2x + 5) = 6x + 15
d) 4 + (5 + 6) = 4 + 11

Answer Key:

1. b) Multiply numbers inside and outside parentheses
2. c) a(b + c)
3. c) a(b + c) = ab + ac
4. b) 3x + 6
5. b) Multiplying numbers in parentheses by a number outside
6. a) 4y + 28
7. c) Both addition and subtraction
8. a) -5x + 15
9. a) Eliminating parentheses
10. d) 4 + (5 + 6) = 4 + 11

Week 26

Question 1. What does the absolute value of a number represent?
a) Its distance from zero on the number line
b) Its square root
c) Its negative value
d) Its double value

Question 2. If the temperature can vary by 5 degrees from a given temperature, which inequality represents this situation?
a) $|x| < 5$
b) $|x| > 5$
c) $|x| = 5$
d) $|x| \neq 5$

Question 3. A toy car can travel up to 3 meters away from its starting point in any direction. Which inequality represents the distance the car can travel from its starting point?
a) $|d| > 3$
b) $|d| < 3$
c) $|d| = 3$
d) $|d| \neq 3$

Question 4. If a bank account balance must stay within $50 of $1000, which inequality represents the possible balances?
a) $|b - 1000| > 50$
b) $|b - 1000| < 50$
c) $|b - 1000| = 50$
d) $|b| = 1000$

Question 5. The absolute value of a number is less than 10. Which of the following could be that number?
a) 15
b) -5

c) 11
d) -12

Question 6. A tree is planted and it can grow or shrink by 2 feet each year. Which inequality represents the possible heights of the tree after one year if it was originally 10 feet tall?
a) $|h - 10| < 2$
b) $|h - 10| > 2$
c) $|h| = 12$
d) $|h| = 8$

Question 7. If the absolute value of a number is greater than 7, which of the following could be that number?
a) 6
b) -8
c) 7
d) 0

Question 8. A student's score on a test can deviate by up to 4 points from 85. Which inequality represents the possible scores?
a) $|s - 85| > 4$
b) $|s - 85| < 4$
c) $|s| = 89$
d) $|s| = 81$

Question 9. The absolute value of a number is equal to 5. Which of the following could be that number?
a) 5 or -5
b) -10
c) 0
d) 10

Question 10. A water tank's level must be kept within 3 gallons of 50 gallons. Which inequality represents the possible water levels?
a) $|w - 50| > 3$
b) $|w - 50| < 3$
c) $|w| = 53$
d) $|w| = 47$

Answer Key:

1. a) Its distance from zero on the number line
2. a) $|x| < 5$
3. b) $|d| < 3$
4. b) $|b - 1000| < 50$
5. b) -5
6. a) $|h - 10| < 2$
7. b) -8
8. b) $|s - 85| < 4$
9. a) 5 or -5

10. b) $|w - 50| < 3$

Week 27

Question 1. What two sides of the right triangle do you use to find its area?
a) Hypotenuse and one leg
b) Both legs
c) Hypotenuse and height
d) Base and height

Question 2. The area of a right triangle is half the product of...
a) its hypotenuse and one leg.
b) its two legs.
c) its base and height.
d) its perimeter and height.

Question 3. If one leg of a right triangle is considered the base, what is the height?
a) The hypotenuse
b) The other leg
c) Half the hypotenuse
d) The perimeter

Question 4. Why is the formula for the area of a right triangle half that of a rectangle?
a) Because a right triangle is half a rectangle
b) Because triangles are always smaller than rectangles
c) Because the hypotenuse is shorter than the other two sides
d) Because rectangles have more sides

Question 5. Which of the following is NOT needed to find the area of a right triangle?
a) Length of the base
b) Length of the height
c) Length of the hypotenuse
d) A ruler

Question 6. If you double the height of a right triangle, what happens to its area?
a) It doubles
b) It halves
c) It remains the same
d) It quadruples

Question 7. If you know the area of a right triangle and its base, how can you find its height?
a) Multiply the area by two and divide by the base
b) Divide the area by the base
c) Multiply the area by the base
d) Add the area to the base

Question 8. The formula for the area of a right triangle is similar to the formula for the area of...
a) a circle

b) a square
c) a rectangle
d) a trapezoid

Question 9. If the base of a right triangle is 10 units and its height is 5 units, what is its area?
a) 15 units squared
b) 50 units squared
c) 25 units squared
d) 100 units squared

Question 10. Which of the following shapes can be split into two right triangles?
a) Circle
b) Square
c) Rectangle
d) Trapezoid

Answer Key:

1. b) Both legs
2. c) its base and height.
3. b) The other leg
4. a) Because a right triangle is half a rectangle
5. c) Length of the hypotenuse
6. a) It doubles
7. a) Multiply the area by two and divide by the base
8. c) a rectangle
9. c) 25 units squared
10. c) Rectangle

Week 28

Question 1. What are the two lines called that divide the coordinate plane into four parts?
a) Axes
b) Grids
c) Quadrants
d) Sectors

Question 2. Which quadrant is the top-right section of the coordinate plane?
a) Quadrant I
b) Quadrant II
c) Quadrant III
d) Quadrant IV

Question 3. If a point is located on the x-axis, what is the y-coordinate?
a) 1
b) 0
c) -1
d) It varies

Question 4. Which coordinate comes first when plotting a point on the coordinate plane?
a) y-coordinate
b) x-coordinate
c) Both at the same time
d) It doesn't matter

Question 5. What is the center point of the coordinate plane called?
a) Center
b) Middle
c) Origin
d) Zero point

Question 6. In which quadrant are both x and y coordinates negative?
a) Quadrant I
b) Quadrant II
c) Quadrant III
d) Quadrant IV

Question 7. If a point is in Quadrant II, which of the following is true?
a) x is positive, y is negative
b) x is negative, y is positive
c) Both x and y are positive
d) Both x and y are negative

Question 8. What is the vertical line on the coordinate plane called?
a) y-axis
b) x-axis
c) z-axis
d) w-axis

Question 9. If a point has coordinates (0,5), where is it located?
a) On the x-axis
b) On the y-axis
c) In Quadrant I
d) In Quadrant II

Question 10. Which quadrant is the bottom-left section of the coordinate plane?
a) Quadrant I
b) Quadrant II
c) Quadrant III
d) Quadrant IV

Answer Key:

1. a) Axes
2. a) Quadrant I
3. b) 0
4. b) x-coordinate

5. c) Origin
6. c) Quadrant III
7. b) x is negative, y is positive
8. a) y-axis
9. b) On the y-axis
10. c) Quadrant III

Week 29

Question 1. What is a net in geometry?
a) A type of grid
b) A 3D shape
c) A 2D shape that can be folded to form a 3D shape
d) A pattern made of straight lines

Question 2. Which 3D shape can be formed from a net that is a single square?
a) Cube
b) Cylinder
c) Sphere
d) Pyramid

Question 3. How many rectangles are in the net of a rectangular prism?
a) 2
b) 4
c) 6
d) 8

Question 4. Which shape does NOT have a circular face in its net?
a) Cone
b) Cylinder
c) Sphere
d) Cube

Question 5. What shape is the base of a pyramid?
a) Triangle
b) Square or rectangle
c) Circle
d) Any polygon

Question 6. How many faces does a 3D shape have if its net has 5 polygons?
a) 3
b) 4
c) 5
d) 6

Question 7. Which 3D shape has a net that consists of one square and four triangles?
a) Square pyramid
b) Rectangular prism
c) Triangular prism

d) Cylinder

Question 8. What is the purpose of a net in geometry?
a) To measure the surface area of a 3D shape
b) To find the volume of a 3D shape
c) To test the strength of a 3D shape
d) To find the weight of a 3D shape

Question 9. Which 3D shape has a net that consists of two parallelograms and three rectangles?
a) Cube
b) Sphere
c) Triangular prism
d) Rectangular pyramid

Question 10. If you cut open a 3D shape and lay it flat, what have you created?
a) A sketch
b) A blueprint
c) A net
d) A draft

Answer Key:

1. c) A 2D shape that can be folded to form a 3D shape
2. a) Cube
3. c) 6
4. d) Cube
5. d) Any polygon
6. c) 5
7. a) Square pyramid
8. a) To measure the surface area of a 3D shape
9. c) Triangular prism
10. c) A net

Week 30

Question 1. Which of the following is a statistical question?
a) What is your favorite color?
b) How old are you?
c) How many students in the class have blue as their favorite color?
d) What is the name of your pet?

Question 2. A statistical question is one that:
a) Can be answered with a single response.
b) Asks about a specific individual.
c) Anticipates variability in the data related to the question.
d) Always has a numerical answer.

Question 3. Which question anticipates an answer with variability?

a) What is the capital of France?
b) How tall is the Eiffel Tower?
c) How many hours do students in your school spend on homework each week?
d) Who wrote "Romeo and Juliet"?

Question 4. Which of the following is NOT a statistical question?
a) How many pages does your book have?
b) What is the average number of pages in books in the school library?
c) How many students in the school play a musical instrument?
d) What is the most common instrument played by students in the school?

Question 5. A good statistical question is one that:
a) Has a definite answer.
b) Can be answered with a yes or no.
c) Can be Googled.
d) Can be answered by collecting data.

Question 6. Which question is likely to have different answers every time you ask a different group of people?
a) What is 2 + 2?
b) Who was the first president of the United States?
c) How many siblings do you have?
d) What is the boiling point of water?

Question 7. Which of the following questions requires data collection from a group to be answered?
a) What is the name of this school?
b) Who is the principal of this school?
c) How many students in this school participate in after-school activities?
d) Is math a subject in school?

Question 8. Which question is looking for an average?
a) How many pets do you have?
b) What is the most popular pet among students in your grade?
c) Who has the most pets in your class?
d) On average, how many pets do students in your class have?

Question 9. Which question can be answered by collecting data from the entire school?
a) What is the name of your best friend?
b) How many languages can you speak?
c) What is the most commonly spoken language at home among students in the school?
d) What is the name of your math teacher?

Question 10. Which of the following questions has an answer that might change over time?
a) What are the colors of the rainbow?
b) How many students in the school have a cell phone?
c) Who is the author of "Moby Dick"?
d) What is the square root of 16?

Answer Key:

1. c) How many students in the class have blue as their favorite color?
2. c) Anticipates variability in the data related to the question.
3. c) How many hours do students in your school spend on homework each week?
4. a) How many pages does your book have?
5. d) Can be answered by collecting data.
6. c) How many siblings do you have?
7. c) How many students in this school participate in after-school activities?
8. d) On average, how many pets do students in your class have?
9. c) What is the most commonly spoken language at home among students in the school?
10. b) How many students in the school have a cell phone?

Week 31

Question 1. Which type of plot uses dots above a number line to show the frequency of data?
a) Bar graph
b) Pie chart
c) Line plot
d) Histogram

Question 2. In a dot plot, what does each dot represent?
a) A category
b) A percentage
c) An individual data point
d) A range of data

Question 3. Which type of plot is best for showing the spread of a small set of numerical data?
a) Bar graph
b) Dot plot
c) Pie chart
d) Histogram

Question 4. If you wanted to display data about students' shoe sizes in a class, which plot would be most appropriate?
a) Pie chart
b) Bar graph
c) Dot plot
d) Line graph

Question 5. Which of the following is NOT a benefit of using a dot plot?
a) Shows individual data points
b) Displays categories of data
c) Easy to read for small data sets
d) Shows the spread and clusters of data

Question 6. What is another name for a dot plot?
a) Line graph
b) Strip plot
c) Bar graph
d) Pie chart

Question 7. In a line plot, what is used to represent the frequency of data?
a) Bars
b) Dots
c) Lines
d) Slices

Question 8. Which type of plot is best for showing changes in data over time?
a) Dot plot
b) Line plot
c) Bar graph
d) Histogram

Question 9. If you have data that is non-numeric, which of the following plots would NOT be appropriate?
a) Bar graph
b) Pie chart
c) Dot plot
d) Line graph

Question 10. Which type of plot can help you easily identify outliers in a data set?
a) Bar graph
b) Pie chart
c) Line plot
d) Dot plot

Answer Key:

1. c) Line plot
2. c) An individual data point
3. b) Dot plot
4. c) Dot plot
5. b) Displays categories of data
6. b) Strip plot
7. b) Dots
8. b) Line plot
9. c) Dot plot
10. d) Dot plot

Week 32

Question 1. Which type of graph is best for showing the relationship between two sets of data?
a) Pie chart
b) Dot plot
c) Scatter plot
d) Histogram

Question 2. What does the height of a bar in a bar graph represent?
a) The category
b) The frequency or amount
c) The average
d) The total number of data points

Question 3. Which graph is best for showing parts of a whole?
a) Line graph
b) Bar graph
c) Scatter plot
d) Pie chart

Question 4. In a histogram, what does the width of each bar represent?
a) A category
b) A range of values
c) An individual data point
d) The total number of data points

Question 5. Which graph is best for showing trends over time?
a) Pie chart
b) Scatter plot
c) Line graph
d) Histogram

Question 6. What is the main purpose of a legend on a graph?
a) To show the title of the graph
b) To explain what each color or symbol represents
c) To display the data values
d) To indicate the type of graph

Question 7. On a line graph, what does the y-axis typically represent?
a) Time
b) Categories
c) Data values
d) Frequency

Question 8. Which graph is best for showing the distribution of a set of data?
a) Line graph
b) Pie chart
c) Scatter plot

d) Histogram

Question 9. What does the x-axis typically represent in a bar graph?
a) Categories
b) Frequency
c) Data values
d) Time

Question 10. Which graph is best for comparing data from different categories?
a) Scatter plot
b) Pie chart
c) Line graph
d) Bar graph

Answer Key:

1. c) Scatter plot
2. b) The frequency or amount
3. d) Pie chart
4. b) A range of values
5. c) Line graph
6. b) To explain what each color or symbol represents
7. c) Data values
8. d) Histogram
9. a) Categories
10. d) Bar graph

Week 33

Question 1. In Excel, what is a collection of rows and columns called?
a) Chart
b) Worksheet
c) Workbook
d) Spreadsheet

Question 2. What kind of chart is best for showing data changes over a period of time?
a) Pie chart
b) Line chart
c) Bar chart
d) Scatter plot

Question 3. What kind of chart is best for showing the proportion of individual parts to the whole?
a) Pie chart
b) Line chart
c) Bar chart
d) Scatter plot

Question 4. In Excel, what do we call the individual boxes where we can enter data?
a) Cells
b) Boxes
c) Charts
d) Sheets

Question 5. What kind of chart is best for comparing individual groups or values?
a) Pie chart
b) Line chart
c) Bar chart
d) Scatter plot

Question 6. In Excel, what is a collection of worksheets called?
a) Chart
b) Worksheet
c) Workbook
d) Spreadsheet

Question 7. What kind of chart is best for showing relationships between two variables?
a) Pie chart
b) Line chart
c) Bar chart
d) Scatter plot

Question 8. In Excel, where can you find the option to create a chart?
a) Home tab
b) Insert tab
c) View tab
d) Data tab

Question 9. In Excel, what do you call a horizontal series of data?
a) Column
b) Row
c) Cell
d) Range

Question 10. In Excel, what do you call a vertical series of data?
a) Column
b) Row
c) Cell
d) Range

Answer Key:

1. d) Spreadsheet
2. b) Line chart
3. a) Pie chart
4. a) Cells
5. c) Bar chart

6. c) Workbook
7. d) Scatter plot
8. b) Insert tab
9. b) Row
10. a) Column

Week 34

Question 1. Which of the following is the average of a set of numbers?
a) Mean
b) Median
c) Mode
d) Range

Question 2. Which of the following is the middle number in a set of numbers?
a) Mean
b) Median
c) Mode
d) Range

Question 3. Which of the following is the number that appears most often in a set of numbers?
a) Mean
b) Median
c) Mode
d) Range

Question 4. If there are two numbers that appear most often in a set of numbers, what can we say about the mode?
a) There is no mode
b) There are two modes
c) There is one mode
d) The mode is zero

Question 5. What do we call the difference between the highest and lowest numbers in a set?
a) Mean
b) Median
c) Mode
d) Range

Question 6. How do we find the median of an even set of numbers?
a) Find the middle number
b) Find the average of the two middle numbers
c) Find the number that appears most often
d) Find the difference between the highest and lowest numbers

Question 7. If all numbers in a set are the same, what can we say about the mean and median?

a) They are different
b) They are the same
c) There is no mean or median
d) The mean is higher than the median

Question 8. What happens to the mean if we add a very large number to our set of numbers?
a) It does not change
b) It becomes smaller
c) It becomes larger
d) It becomes the median

Question 9. What happens to the median if we add a number to our set that is smaller than our current median?
a) It does not change
b) It may become smaller
c) It becomes larger
d) It becomes the mean

Question 10. If a set of numbers has more than one mode, it is called?
a) Unimodal
b) Bimodal
c) Multimodal
d) Modal

Answer Key:

1. a) Mean
2. b) Median
3. c) Mode
4. b) There are two modes
5. d) Range
6. b) Find the average of the two middle numbers
7. b) They are the same
8. c) It becomes larger
9. b) It may become smaller
10. c) Multimodal

Week 35

Question 1. What is the first number in an ordered pair called?
a) y-coordinate
b) x-coordinate
c) z-coordinate
d) w-coordinate

Question 2. What is the second number in an ordered pair called?
a) y-coordinate
b) x-coordinate

c) z-coordinate
d) w-coordinate

Question 3. In the ordered pair (3, 5), what is the x-coordinate?
a) 3
b) 5
c) 8
d) 0

Question 4. In the ordered pair (6, -4), what is the y-coordinate?
a) 6
b) -4
c) 2
d) 0

Question 5. If a point is on the x-axis, what is the y-coordinate?
a) 0
b) 1
c) -1
d) 100

Question 6. If a point is on the y-axis, what is the x-coordinate?
a) 0
b) 1
c) -1
d) 100

Question 7. What is the ordered pair for a point located at the origin?
a) (0, 0)
b) (1, 1)
c) (-1, -1)
d) (100, 100)

Question 8. In which quadrant would the point (5, -3) be located?
a) Quadrant 1
b) Quadrant 2
c) Quadrant 3
d) Quadrant 4

Question 9. In which quadrant would the point (-4, -6) be located?
a) Quadrant 1
b) Quadrant 2
c) Quadrant 3
d) Quadrant 4

Question 10. What do we call the point where a graph crosses the y-axis?
a) x-intercept
b) y-intercept
c) Origin

d) Midpoint

Answer Key:

1. b) x-coordinate
2. a) y-coordinate
3. a) 3
4. b) -4
5. a) 0
6. a) 0
7. a) (0, 0)
8. d) Quadrant 4
9. c) Quadrant 3
10. b) y-intercept

Week 36

1. 2,347.17 – 1,143.2
2. 6,708.23 – 377.5
3. 4,558 – 2,231.5
4. 805.15 – 663.11
5. 202.7 – 11.5
6. 88.28 – 18.08
7. 127.75 – 130.7
8. 604.24 – 20.002
9. 145.015 – 24.005
10. 100.009 – 79.5

Answers:

1. 1203.97
2. 6330.73
3. 2326.5
4. 142.04
5. 191.2
6. 70.2
7. -2.95
8. 584.238
9. 121.01
10. 20.509

Week 37

Question 1. Which of the following is a statistical question?
a) What is your favorite color?
b) How old are you?
c) How many students in the class have blue eyes?
d) What is the capital of France?

Question 2. A statistical question is one that:
a) Can be answered with a single response.
b) Can be answered with data.
c) Has only one correct answer.
d) Is based on personal opinions.

Question 3. Which of the following is NOT a statistical question?
a) How tall is the tallest student in the class?
b) What is the average height of students in the class?
c) How many students are in the class?
d) Who won the last soccer match?

Question 4. A non-statistical question:
a) Requires data collection.
b) Can be answered with a single response.
c) Has multiple correct answers.
d) Requires a survey to answer.

Question 5. Which of the following is a statistical question?
a) What is the most popular book in the library?
b) How many books does the library have?
c) How many students have borrowed more than 5 books this year?
d) Who is the author of "Harry Potter"?

Question 6. Statistical questions typically have answers that:
a) Vary from one individual to another.
b) Are always the same.
c) Are based on personal opinions.
d) Do not require data.

Question 7. Which of the following is NOT a statistical question?
a) What is the median score on the last math test?
b) How did you feel about the last math test?
c) How many students scored above 90 on the last math test?
d) What is the range of scores on the last math test?

Question 8. A statistical question is one that:
a) Can be answered without collecting data.
b) Can be answered by collecting data from a group.
c) Has a definite answer.
d) Is based on feelings.

Question 9. Which of the following is a statistical question?
a) Who is the principal of the school?
b) How many students in the school play a musical instrument?
c) What is the name of the school?
d) Is math a subject in school?

Question 10. Non-statistical questions:
a) Always require a survey.
b) Have answers based on facts or opinions without variability.
c) Have answers that change depending on the group.
d) Require data analysis.

Answer Key

1. c) How many students in the class have blue eyes?
2. b) Can be answered with data.
3. d) Who won the last soccer match?
4. b) Can be answered with a single response.
5. c) How many students have borrowed more than 5 books this year?
6. a) Vary from one individual to another.
7. b) How did you feel about the last math test?
8. b) Can be answered by collecting data from a group.
9. b) How many students in the school play a musical instrument?
10. b) Have answers based on facts or opinions without variability.