

1. The sum of two numbers is 20. If one of the numbers is between 6 and 8, then find the bigger number.

(a) 13

(c) 19

(b) 21

(d) 20

2. Mark has written a math exam. He has 60 questions correctly out of 80 questions given in the exam. Find the percentage of questions which are answered correctly.

(a) 80%

(c) 87 %

(b) 85%

(d) 75%

3. Mr. Kemp starts from his house at 9.15 am and he reaches the place B at 10.20 am. He takes rest for 30 minutes. Then he starts from B and reaches the place C 12.30 pm. How long has Mr. Kemp traveled from his house to the place C.

(a) 180 minutes

(c) 165 minutes

(b) 125 minutes

(d) 128 minutes

4. If the diagonal of a square is  $\sqrt{32}$  cm, then the length of the side of a square is

(a) 8 cm

(c) 6 cm

(b) 4 cm

(d) 10 cm

5. The base and height of a triangle is 8 cm and 6 cm respectively. Find the area of the triangle.

(a)  $25 \text{ cm}^2$

(c)  $24 \text{ cm}^2$

(b)  $17 \text{ cm}^2$

(d)  $18 \text{ cm}^2$

6. Let "x", "x+2" and "x+4" be the angles of a triangle. Find the value of "x".

(a) 58

(c) 62

(b) 63

(d) 64

7. How many tangents can be drawn to a circle from a point out of the circle?

(a) 2

(c) 4

(b) 1

(d) 8

8. How many different words can be formed by using the letters in the word "SQUARE"?

(a) 530

(c) 230

(b) 820

(d) 720

9. Find the number of two digit numbers which are exactly divisible by 7.

(a) 18

(c) 19

(b) 11

(d) 33

10. Lily goes to toys shop to purchase a toy to his child. A toy costs \$20. Lily has to pay tax 5%. How much does she have to pay in total?

(a) 12

(c) 20

(b) 21

(d) 22

11. The lengths of the three sides of a right angled triangle are 4, 3 and "x". Let "x" be the longest side. Find the value of "x".

(a) 2

(c) 5

(b) 1

(d) 4

12. Mr. Martin traveled from his house to the post office at the rate of 25 kmph and walked back at the rate of 4 kmph. If the whole journey took 5 hours 48 minutes, find the distance of the post office from the village.

(a) 20

(c) 30

(b) 50

(d) 40

13. Find the volume of the right circular cylinder whose height is 10 cm and the radius of the base is 7 cm.

(a)  $360 \text{ cm}^3$

(c)  $1700 \text{ cm}^3$

(b)  $1540 \text{ cm}^3$

(d)  $2200 \text{ cm}^3$

14. The sum of the digits of a two digit number is 15 and if 19 be added to the number, the numbers are interchanged. Find the number.

(a) 35

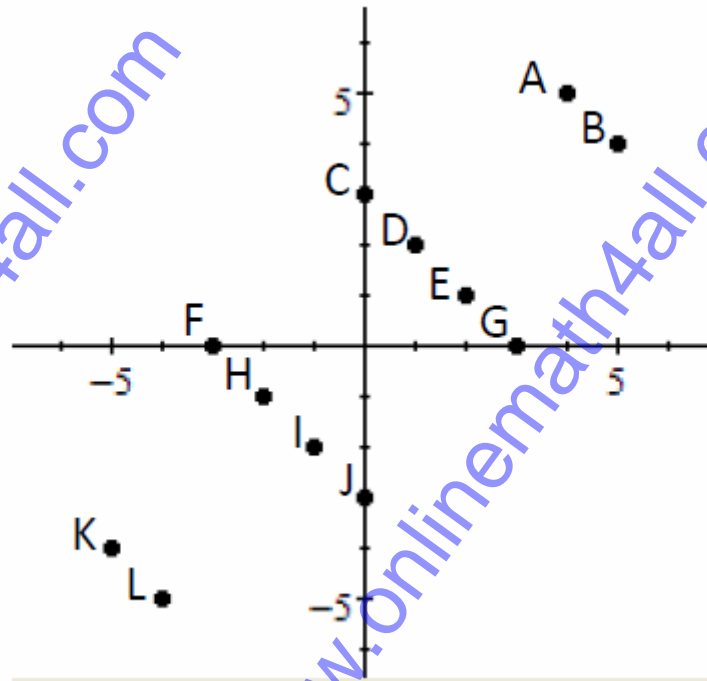
(c) 58

(b) 45

(d) 78

15. Which set of points on the coordinate plane match the input/output values in the table?

Input	Output
-4	-5
-2	-1
0	3



(a) LHC

(b) HIJ

(c) ADE

(d) None of these

16. Mary and Keshia went shopping last weekend. Mary bought twice as many shirts as Keshia. If Keshia bought  $x$  number of shirts, which expression shows the total number of shirts that Melanie and Becky bought.

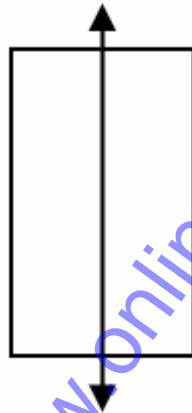
(a)  $x+5x$

(c)  $x+2x$

(b)  $8x+3x$

(d)  $x$

17. If the rectangle below is rotated about the line that is shown, what three dimensional figure will be formed?



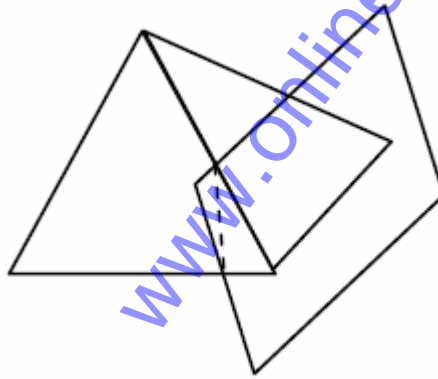
(a) Sphere

(c) Cube

(b) Cylinder

(d) Cone

18. The pyramid shown is cut by a plane that is vertical to the rectangular base. What shape is the cross section?



(a) Rectangle

(c) parallelogram

(b) Triangle

(d) Trapezoid

19. A number increased by two is 9. Find the number.

(a) 7

(c) 10

(b) 9

(d) 8



20. A farmer grows 252 kilograms of apples. He sells them to a grocer who divides them into 5 kilogram and 2 kilogram bags. If the grocer uses the same number of 5 kg bags as 2kg bags, then how many bags did he use in all?

(a) 52 bags

(c) 62 bags

(b) 25 bags

(d) 72 bags

21. In 1969 the price of 5 kilograms of flour was \$0.75. In 1970 the price was increased 15 percent. In 1971, the 1970 price was decreased by 5 percent. What was the price of 5 kilograms of flour in 1971?

(a) 0.32

(c) 0.82

(b) 0.52

(d) 0.62

22. A rectangular chalk board is 3 times as long as it is wide. If it were 3 meters shorter and 3 meters wider, it would be square. What is the length of the chalk board?

(a) 9m

(c) 8m

(b) 7m

(d) 5m

23. Groups of campers were going to an island. On the first day 10 went over and 2 came back. On the second day, 12 went over and 3 came back. If this pattern continues, how many would be on the island at the end of a week?

(a) 90

(c) 66

(b) 85

(d) 77

24. Evelyn is reading about Windermere Castle in Scotland. Many years ago, when prisoners were held in various cells in the dungeon area, they began to dig passages connecting each cell to each of the other cells in the dungeon. If there were 20 cells in all, what is the fewest number of passages that had to be tunneled out over the years?

(a) 190

(c) 135

(b) 135

(d) 160

25. Conrad's Taxi Service charges \$1.50 for the first mile and \$.90 for each additional mile. How far could Mr. Kulp go for \$20 if he gives the driver a \$2 tip?

(a) 14 miles

(c) 16 miles

(b) 19 miles

(d) 18 miles

26. Regina has received a pet rabbit from her neighbor Rodney who is about to move to an apartment that does not allow pets. Her father is going to help her build a run for the rabbit in their back yard, but he wants Regina to design it. Regina sits down to think about the possibilities. Her father says that the run must be rectangular with whole number dimensions. If they want to enclose 48 square feet, how many options do they have?

(a) 5 ways

(c) 6 ways

(b) 7 ways

(d) 8 ways

27. Mary has \$50.00. She goes to the mall and buys lipstick and then she buys shampoo, which is half the price of the lipstick. She then spends half of what she has left on a purse, leaving her with \$15.00. How much did the shampoo cost?

(a) \$2.85

(c) \$6.67

(b) \$9.28

(d) \$2.36

28. Which expression could be used to solve the problem below?  
To cater a luncheon, a hotel charges \$50 per hour for use of a dining room plus \$24.50 per person. What is the total cost for a 2-hour luncheon for 45 people?

(a)  $2 \times 50 + 24.50 + 45$

(c)  $2 \times 50 + 24.50 \times 45$

(b)  $2 \times 24.50 + 50 \times 45$

(d)  $2 \times 45 + 50 \times 24.50$

29. Conner's parents asked him to save  $\frac{2}{5}$  of his allowance each week to help pay for summer camp. What percent of his allowance did Conner's parents ask him to save?

(a) 25%

(c) 30%

(b) 40%

(d) 60%

30. Which of the following CANNOT be used to find the perimeter of a square with side length  $s$ ?

(a)  $s + s + s + s$

(c)  $2s$

(b)  $4s$

(d)  $s \times s$

31. Which expression can be used to find the maximum number of 0.2-meter lengths of rope that can be cut from a 6.5-meter length of rope?

(a)  $0.2 \div 6.5$

(c)  $0.2 + 6.5$

(b)  $6.5 \div 0.2$

(d)  $6.5 \times 0.2$

32. Mr. Gordon asked 39 students how many times they used the dictionary last week in his class. The responses are shown in the table.

Dictionary Use

Number of Times Used	Number of Students
5	3
6	5
7	7
8	12
9	8
10	4

Which measure of the data represents the most common number of times the students used the dictionary?

(a) Mean

(c) Median

(b) Mode

(d) Range

33. Kira drew a circle with a radius of 20 inches and another circle with a radius of 10 inches. What is the approximate difference between the areas of the 2 circles?

(a) 300 in.<sup>2</sup>

(c) 314 in.<sup>2</sup>

(b) 942 in.<sup>2</sup>

(d) 1,256 in.<sup>2</sup>

34 The cost of Matt and Natalie's dinner was \$27.35. They want to leave a 20% tip. Which of the following is closest to the amount of the tip they want to leave?

(a) \$4.00

(c) \$4.50

(b) \$5.00

(d) \$5.50

35. If the corresponding angles of 2 polygons are congruent and the lengths of the corresponding sides of the polygons are proportional, the polygons are \_\_\_\_\_

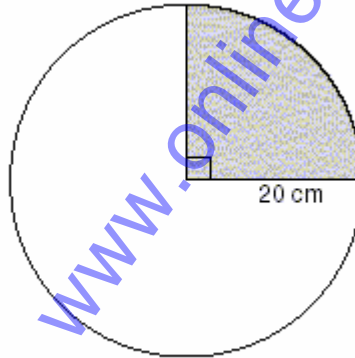
(a) Regular

(c) Similar

(b) Congruent

(d) Symmetric

36. Margarita traces a circle with a radius of 20 centimeters like the one shown below. She will color in the shaded region.



What is the approximate area of the shaded region?

(a)  $314 \text{ cm}^2$

(c)  $270 \text{ cm}^2$

(b)  $90 \text{ cm}^2$

(d)  $1,256 \text{ cm}^2$

37. In which data set are the mean, median, mode, and range all the same number?

(a)  $\{1, 2, 3, 3, 2, 1, 2\}$

(c)  $\{1, 2, 3, 1, 2, 3, 1\}$

(b)  $\{1, 3, 3, 3, 2, 3, 1\}$

(d)  $\{2, 2, 1, 2, 3, 2, 3\}$



38. A company published 110 books last year, and 8 of them became best-sellers. Which best represents the percent of books the company published last year that did NOT become best-sellers?

(a) 7%

(c) 8%

(b) 93%

(d) 102%

39. Mrs. Gutiérrez bought 2 dozen cans of soda priced at 6 cans for \$1.98 and 18 bottles of water priced at 6 bottles for \$2.16. What is the total amount she spent, not including tax, on soda and bottled water?

(a) \$6.48

(c) \$14.40

(b) \$7.92

(d) \$16.56

40. The angle  $A$  of a triangle  $ABC$  is equal to the sum of the other two angles. Also the ratio of the measure of angle  $B$  to that of  $C$  is 4:5. Determine the three angles?

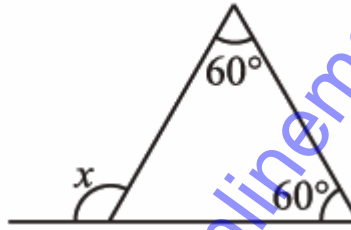
(a) 90, 40, 50

(c) 60, 60, 60

(b) 120, 30, 30

(d) 70, 30, 80

41. Find the angle in the below picture?



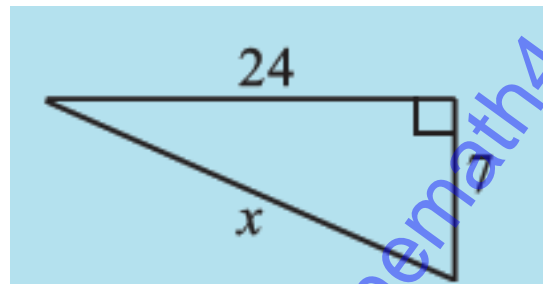
(a) 60

(c) 120

(b) 140

(d) 160

42. Find the value of  $x$  in the below picture



(a) 625

(c) 8

(b) 25

(d) 34

43. Find the value of  $3^7 \div 3^3$

(a) 9

(c) 729

(b) 27

(d) 81

44. Find the value of  $7^3 \div 7^3$

(a) 0

(c) 1

(b) 3

(d) 2

45. 6 bowls cost Rs 90. What would be the cost of 10 such bowls?

(a) 150

(c) 450

(b) 180

(d) 220

46. The mean weight of 4 boys is 56kg and that of 6 girls is 46kg. Find the combined mean weight of 10 students

(a) 10kg

(c) 50kg

(b) 30kg

(d) 40kg

47. The school team won 6 games against in this year against 4 games won last year. What is the percent increase?

(a) 42

(c) 36

(b) 24

(d) 50

48. The length of a rectangle is 7.1 cm and its breadth is 2.5 cm. What is the area of the rectangle?

(a)  $65.53 \text{ cm}^2$

(c)  $17.75 \text{ cm}^2$

(b)  $51 \text{ cm}^2$

(d)  $43.85 \text{ cm}^2$

49. Find the average of 4.2, 3.8 and 7.6.

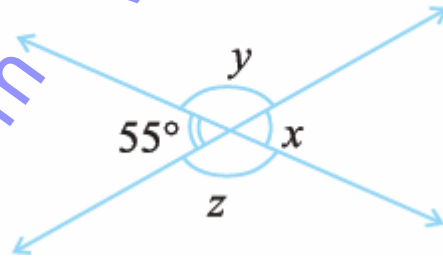
(a) 5.2

(c) 2.5

(b) 3.2

(d) 4.8

50. Find the value of  $y$  in the below picture



(a) 55

(c) 125

(b) 145

(d) 130

Answers

1. a	2. d	3. c	4. b	5. c	6. a
7. a	8. d	9. c	10. b	11. c	12. a
13. b	14. d	15. a	16. c	17. b	18. d
19. a	20. d	21. c	22. a	23. d	24. a
25. b	26. a	27. c	28. c	29. b	30. d
31. b	32. b	33. b	34. d	35. c	36. a
37. a	38. b	39. c	40. a	41. c	42. b
43. d	44. c	45. a	46. c	47. d	48. c
49. a	50. c				