

1. I have \$1.25. If I spend one-fifth of it, how much money, in dollars, do I have left?

(a) 2

(c) 5

(b) 1

(d) 3

2. If I am three years younger than Jae, Jae is 5 years older than Ben, and Ben is 13, how old am I?

(a) 18

(c) 15

(b) 17

(d) 16

3. The cost of BCA math camp is \$50 per student. However, Mr. Holbrook buys 5 dozen donuts every day for the 16 days. If donuts cost \$10 per dozen, how many students need to attend math camp in order for Mr. Holbrook to break even?

(a) 16

(c) 13

(b) 12

(d) 14

4. Arthur wants a new bicycle. He earns \$2 a day for taking out the trash. If the bicycle costs \$30, how many days must Arthur take out the trash for?

(a) 18

(c) 16

(b) 13

(d) 15

5. Calculate  $3.14 + 1.41 + 4.159$ .

(a) 8.709

(c) 1.538

(b) 9.503

(d) 10.522

6. Find the missing term of the following

$$3 + \underline{\hspace{2cm}} + 4000 + 60 + 70000 = 74863$$

(a) 500

(c) 600

(b) 800

(d) 700

7. Find the reduced fraction of the decimal 0.75

(a)  $75/100$

(c)  $3/4$

(b)  $15/20$

(d)  $7/50$

8. Complete the equivalent ratio  $3/20 = x/40$

(a) 6

(c) 7

(b) 8

(d) 9

9. Two coins contain silver and copper in the ratio 4:5 and 7:15. Which of them contain more silver?

(a) Both of them

(c) Second coin

(b) None of these

(d) First coin

10. 18 mangoes cost \$27. What will 15 mangoes cost?

(a) \$ 28.05

(c) \$ 22.5

(b) \$ 25.38

(d) \$ 28.08

11. A train goes 280 km in 4 hours. How far will it go in 24 hours?

(a) 1680

(c) 1540

(b) 1290

(d) 1320

12. There are 50 pages in a magazine. 12% of the pages have pictures on them. How many pages of the magazine have no pictures on them?

(a) 33 pages

(c) 45 pages

(b) 51 pages

(d) 44 pages

13. John receives \$750 a month from his mother. If he spends 55% of it on food, how much does he spend on food?

(a) \$ 512.50

(c) \$ 412.5

(b) \$ 505.50

(d) \$ 515.50

14. Find the simple interest on \$3000 at the rate of 4% per annum for 2 years?

(a) \$240

(c) \$120

(b) \$540

(d) \$140

15. Find the average of 4, 10, 18, 8

(a) 65

(c) 85

(b) 64

(d) 89

16. In a class of 55 of pupils, 44 are boys. What percentage of the pupils are girls

(a) 30%

(c) 20%

(b) 16%

(d) 57%

17. What is the next number of the pattern?

320, 160, 80, 40, \_\_\_\_\_

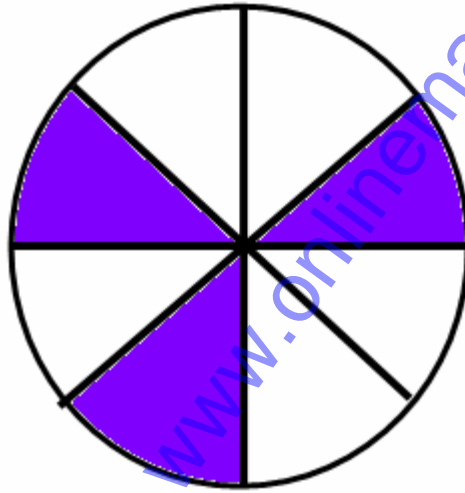
(a) 20

(c) 30

(b) 28

(d) 30

18. Express the shaded portion of the following in fraction



(a)  $\frac{5}{3}$

(c)  $\frac{6}{5}$

(b)  $\frac{8}{3}$

(d)  $\frac{3}{8}$

19. Add the following  
 $6a+2a+8a$

(a)  $15a$

(c)  $13a$

(b)  $17a$

(d)  $16a$

20. In which quadrant does the point (3,4) lie on ?

(a) 1st

(c) 2nd

(b) 3rd

(d) 4th

21. How many numbers are divisible by 6 between 10 and 50 ?

(a) 3

(c) 7

(b) 5

(d) 6

22. Find the product of  $1.008 \times 7$

(a) 5.055

(c) 7.056

(b) 6.568

(d) 8.008

23. Which of the following is correct?

(a)  $-3 > 0$

(c)  $0 < -1$

(b)  $3 < 2$

(d)  $0 > -5$



24. Joseph earned \$20.70 for working 6 hours. How much was he paid for an hour?

(a) \$3.45

(c) \$3.83

(b) \$4.75

(d) \$5.20

25. The area of a picture is 240 sq.cm. Its length is 20cm. What is the breadth?

(a) 11 cm

(c) 13 cm

(b) 12 cm

(d) 14 cm

26. Find the greatest common factor of 15,35 and 75 ?

(a) 525

(c) 425

(b) 325

(d) 625

27. The value of 3 cubed times 2 squared is

(a) 100

(c) 420

(b) 108

(d) 180

28. If  $A = \{2, 4, 6, 8\}$  then what will be the value of  $n(A)$

(a) 18

(c) 20

(b) 8

(d) 4

29. What is the value of  $6!$

(a) 520

(c) 720

(b) 420

(d) 250

30. The value of 25 factorial divided 24 factorial is

(a) 23

(c) 24

(b) 25

(d) 26

31. Find the perimeter in inches of a square that has area  $49 \text{ ft}^2$ .

(a) 336 inches

(c) 446 inches

(b) 325 inches

(d) 225 inches

32. Robert's backyard measures 37 by 53 feet. What is the area of Robert's backyard, in  $\text{ft}^2$ ?

(a)  $1963 \text{ ft}^2$

(c)  $1856 \text{ ft}^2$

(b)  $1553 \text{ ft}^2$

(d)  $1961 \text{ ft}^2$

33. The area of triangle  $ABC$  is 35. If  $BC = 10$ , then find the height from  $A$  to  $BC$ .

(a) 6

(c) 7

(b) 4

(d) 3

34. How many ways can Ally, Brett, and Candy be lined up so that Ally is standing next to her best friend Candy?

(a) 10

(c) 5

(b) 2

(d) 4

35. What is the area of a square with a diagonal of length 8?

(a) 32

(c) 42

(b) 52

(d) 50

36. What is the volume of a square pyramid with base side length 5 and height 36?

(a) 420

(c) 300

(b) 460

(d) 500

37. Find the area of trapezoid  $ABCD$  given  $AB = 9$ ,  $CD = 7$ , and the distance between parallel line segments  $AB$  and  $CD$  is 3.

(a) 25

(c) 209

(b) 24

(d) 31

38. If  $1 - 7x = 2x$ , then what is  $x$ ?

(a)  $1/9$

(c)  $1/7$

(b)  $8/7$

(d)  $3/7$

39. Find the number of factors of 36.

(a) 8

(c) 9

(b) 11

(d) 10

40. What is the distance from the point  $(3,2)$  to the point  $(0,6)$ ?

(a) 4

(c) 6

(b) 5

(d) 7

41. How many integers less than 50 have exactly 2 distinct prime factors?

(a) 28

(c) 23

(b) 38

(d) 18

42. The incircle of triangle  $ABC$  touches  $BC$  at  $D$ ,  $AC$  at  $E$ , and  $AB$  at  $F$ . Given  $AF = 3$ ,  $BD = 4$ , and  $CE = 6$ , find the perimeter of triangle  $ABC$ .

(a) 26

(c) 30

(b) 65

(d) 90

43. Find the sum of the first 16 terms of the arithmetic sequence 3, 7, 11 . . .

(a) 444

(c) 468

(b) 528

(d) 477

44. Brian likes to feed the ducks. The first day he uses 1 slice of bread. The second day he uses 2 slices of bread. The third day he uses 3 slices of bread. If this pattern continues, how many slices of bread will he use on the tenth day?

(a) 40

(c) 20

(b) 10

(d) 17

45. Calculate  $2 \times 0 \times 0 \times 6 =$

(a) 0

(c) 2

(b) 1

(d) 3

46. Express  $11/5$  in decimal form.

(a) 2.8

(c) 2.2

(b) 3.2

(d) 5.4

47. The sum of the angles of a triangle is

(a) 180

(c) 360

(b) 540

(d) 720

48. The circle is having 14 cm as diameter. Then what will be the perimeter of the circle

(a)  $32\pi$

(c)  $31\pi$

(b)  $28\pi$

(d)  $14\pi$



49. Two numbers have a sum of 15 and a product of 36. What is the larger of the two numbers?

(a) 11

(c) 13

(b) 12

(d) 14

50. If Eugene counted to 600 by 6's, starting with 6, how many numbers did he count that are less than 600?

(a) 49

(c) 99

(b) 48

(d) 46

Answers

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