

1. A problem author for a math competition wrote 44 problems so far, but he needs a total of 50. How many more problems must he write?

(a) 5

(c) 6

(b) 7

(d) 8

2. Calculate $1 + 2 \times 3$.

(a) 5

(c) 9

(b) 7

(d) 6

3. A rectangle has length 19 and width 14. What is its perimeter?

(a) 66

(c) 33

(b) 56

(d) 58

4. In the word DIOPHANTINE, what fraction of the letters are vowels?

(a) $\frac{2}{11}$

(c) $\frac{4}{11}$

(b) $\frac{3}{11}$

(d) $\frac{5}{11}$

5. Calculate $125 \times 125 \times 8 \times 8 \times 8$?

(a) 5,000,000

(c) 8,000,000

(b) 6,000,000

(d) 7,000,000

6. A painter mixes 4 gallons of white paint with 1 gallon of red paint to make 5 gallons of her signature Pink paint. Each gallon of white paint costs \$2 and each gallon of red paint costs \$3. How much money does the painter need to make 400 gallons of pink paint?

(a) 1000

(c) 880

(b) 300

(d) None

7. The Road Runner ran 200 miles in 10 minutes, walked 40 miles in 20 minutes, and then ran another 360 miles in 10 minutes. What was its average speed for the whole trip in miles per hour?

(a) 300

(c) 500

(b) 900

(d) 100

8. Change $\frac{3}{10}$ as decimal

(a) 0.58

(c) 0.56

(b) 0.25

(d) 0.3

9. If $5x = 20$ then what will be the value of x ?

(a) 3

(c) 4

(b) 6

(d) 5

10. What kind of angle is this ?



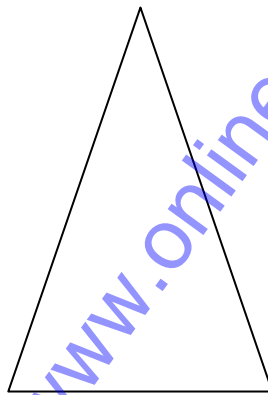
(a) Acute

(c) Obtuse

(b) Right

(d) straight

11. What type of Triangle is this?



(a) Isosceles

(c) Equilateral

(b) Right

(d) Scalene

12. What is the least positive number divisible by 4, 5, 6, and 9?

(a) 150

(c) 160

(b) 120

(d) 180

13. We have 5 numbers whose average is 11. Suppose we include 29 as a sixth number. What is the new average of these 6 numbers?

(a) 3

(c) 12

(b) 14

(d) 15

14. What is the value of $5!$?

(a) 180

(c) 120

(b) 130

(d) 150

15. Express $\frac{9}{20}$ as percentage?

(a) 35%

(c) 45%

(b) 19%

(d) 60%

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

(a) 1

(c) 1.50

(b) 1.25

(d) 1.15

17. Calculate $3.14+1.41+4.159$.

(a) 8.190

(c) 8.709

(b) 8.790

(d) 8.079

18. For how many integers between 2 and 102 is the square root of the integer also an integer?

(a) 7

(c) 8

(b) 9

(d) 10

19. The National Quiz bowl Tournament has a registration fee of \$500 per team. Each member's plane ticket costs \$250 and the hotel rooms cost \$60 per person. If 4 people attend the tournament and share the total fees equally, how much does each person pay in dollars?

(a) 435

(c) 335

(b) 465

(d) 555

20. Walt Disney's stock starts at \$100 dollars per share. If the stock rises 20% and falls by 20% of the new price, what is the new stock price in dollars?

(a) 36

(c) 46

(b) 56

(d) 96

21. 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) \$ 50

(c) \$ 10

(b) \$ 25

(d) \$ 32

22. To get ready for a math competition, Kevin buys a pencil for fifty cents, a ruler for one dollar and graph paper for thirty dollars. How much money does Kevin spend?

(a) \$31.50

(c) \$ 33.80

(b) \$33.50

(d) \$ 35.80

23. Calculate $2 \times 0 \times 0 \times 45$

(a) 2

(c) 0

(b) 4

(d) 90

24. Mrs. Stone makes 20 telephone calls per day. How many telephone calls does she make in the month of January?

(a) 520

(c) 720

(b) 620

(d) 520

25. What is the value of 3^8

(a) 9521

(c) 6571

(b) 6561

(d) None

26. Calculate $10 - 9 + 8 - 7 + 6 - 5 + 4 - 3 + 2 - 1$.

(a) 5

(c) 4

(b) 2

(d) 6

27. Compute the number of letters in the alphabet plus the number of days in a week.

(a) 15

(c) 16

(b) 25

(d) 33

28. Aaron knows he has somewhere between 100 and 110 baseball cards in his collection. If he counts his cards 2 at a time, he has 1 card left over. If he counts his cards 5 at a time, he has 2 left over. How many cards are in Aaron's collection?

(a) 106

(c) 107

(b) 108

(d) 109

29. The product of two different positive whole numbers is 11. What is their sum?

(a) 12

(c) 16

(b) 17

(d) 18

30. Mike arrived at a party 27 minutes before 3:23 PM. What time was it 11 minutes after he arrived?

(a) 3:15 PM

(c) 3:06 PM

(b) 3:07 PM

(d) 3:08 PM

31. $20 + 40 + 60 + 80 = (1 + 2 + 3 + 4) \times ?$

(a) 10

(c) 12

(b) 20

(d) 15

32. If a bird's wings flap 64 times every second, then how many times do a bird's wings flap in 10 minutes?

(a) 28,600

(c) 38,400

(b) 5280

(d) 5360

33. If a race began at 3 : 43 PM and ended at 5 : 57 PM the same day, the race was half over at what time?

(a) 4:19

(c) 4:15

(b) 4:52

(d) 4:50

34. What is the remainder when 6668 is divided by 6?

(a) 2

(c) 3

(b) 8

(d) 7

35. Dr. Meyers raises chickens and rabbits in his classroom. He counts 45 total animals, and 144 legs (each chicken has 2 legs, while each rabbit has 4 legs). How many rabbits does Dr. Meyers have?

(a) 28

(c) 28

(b) 20

(d) 12

36. Counting from either end of the line, Michelle is 18th in line. How many people are in the line?

(a) 28

(c) 49

(b) 35

(d) 30

37. A triangle has a height of length 4 and a base of length 3. What is the triangle's area?

(a) 8

(c) 10

(b) 6

(d) 2

38. Connie took a test with 25 questions. For every question she got right, she earned 4 points, and for every question she got wrong, she lost 1 point. She answered every question, and got a score of 80. How many questions did she get right?

(a) 21

(c) 31

(b) 51

(d) 41

39. A square has an area of 16 square inches. What is the length, in inches, of one of its sides?

(a) 7

(c) 4

(b) 3

(d) 1

40. The sum of five different positive integers is 100. What is the largest possible value for any one of these integers?

(a) 70

(c) 20

(b) 90

(d) 80

41. The average (arithmetic mean) of five numbers in a list is 35. The average of the first two numbers is 26. What is the average of the last three numbers?

(a) 81

(c) 51

(b) 31

(d) 71

42. Evaluate the following: $26262 + 36363 + 138439$.

(a) 201064

(c) 201514

(b) 201063

(d) 2085

43. Compute $\frac{1}{6} + \frac{1}{9}$

(a) $\frac{8}{15}$

(c) $\frac{7}{15}$

(b) $\frac{5}{18}$

(d) $\frac{6}{19}$

44. Which of the following is the symbol greater than?

(a) $>$

(c) $<$

(b) $=$

(d) None of these

45. How many terms in the following set $A = \{1, 2, 4, 5\}$

(a) 2

(c) 3

(b) 4

(d) 6

46. Find 1111×1111

(a) 1234231

(c) 1234321

(b) 1234331

(d) 1234561

47. Triangle ABC has sides of lengths 4, 5, and 6. Find the perimeter of ABC.

(a) 15

(c) 14

(b) 13

(d) 12

48. I have one ten dollar bill and two quarters. A water bottle costs \$1.75. What is the maximum number of water bottles I can buy?

(a) 5

(c) 7

(b) 6

(d) 8

49. How many \$0.25 packs of gum can I purchase with \$3.33?

(a) 13

(c) 14

(b) 12

(d) 15

50. Calculate $2.71+7.18+1.828$

(a) 11.781

(c) 11.718

(b) 11.723

(d) 11.753

Answers

1. c

2. b

3. a

4. d

5. c

6. c

7. b

8. d

9. c

10. b

11. c

12. d

13. b

14. c

15. c

16. a

17. c

18. b

19. a

20. d

21. c

22. a

23. c

24. b

25. b

26. a

27. d

28. c

29. a

30. b

31. b

32. c

33. d

34. a

35. c

36. b

37. b

38. a

39. c

40. b

41. c

42. a

43. b

44. a

45. b

46. c

47. a

48. b

49. a

50. c