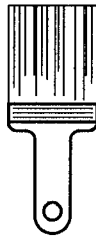


1. Tidy Painters will paint Taylor's house for a charge of \$30 per hour. It takes 40 hours for their crew to complete the job. How many dollars does the paint job cost?



1. _____

2. The probability of rain tomorrow is $\frac{3}{10}$. What is the probability that it will not rain tomorrow? Express your answer as a common fraction.

2. _____

3. A nylon rope of length 140 feet is cut into three pieces. The longest piece is five times as long as each of the other two pieces. How many feet are in the length of the longest piece?

3. _____

4. What positive integer is 56 less than its square?

4. _____

5. Solve for x : $\frac{x+3}{4} = -x - 3$.

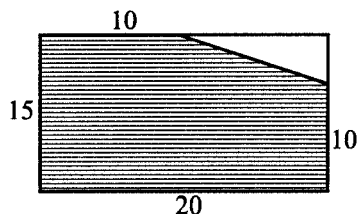
5. _____

6. What is the value of the expression
 $1 - 2 + 3 - 4 + 5 - 6 + 7 - 8 + 9 - 10 + 11 - 12 + 13$?

6. _____

7. A triangle is removed from the corner of a rectangle as shown. What is the number of square units in the area of the shaded pentagon?

7. _____

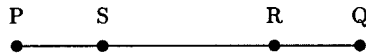


8. What is $3 + 4 \times 5 - 6$?

8. _____

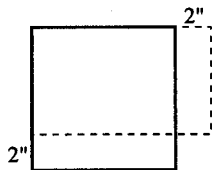
9. In the diagram shown, $PS = \frac{1}{3} PR$, $PR = \frac{3}{4} PQ$, and $PQ = 40$ cm. What is the number of centimeters in the length of \overline{SQ} ?

9. _____



10. A square poster is replaced by a rectangular poster that is 2 inches wider and 2 inches shorter. What is the positive difference in the number of square inches in the areas of the posters?

10. _____

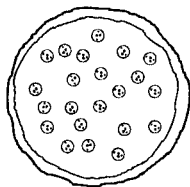


11. Two cubes have edge lengths of 6 inches and 12 inches. What is the ratio of the surface area of the smaller cube to the surface area of the larger cube? Express your answer as a common fraction.

11. _____

12. Seven math students ordered \$15.00 worth of pizza. They split the cost as evenly as possible, so some students paid \$2.14 each, and the others paid \$2.15 each. How many students paid the lesser amount?

12. _____



13. Two pencils and one pen cost 80¢, and one pencil and two pens cost \$1.15. How many cents would three pencils cost?

13. _____

14. The gauge of an oil tank indicated that the tank was $\frac{1}{7}$ full. After 240 gallons of oil were added to the tank, the gauge indicated that the tank was $\frac{4}{7}$ full. How many gallons of oil will the tank hold, assuming the gauge is accurate?

14. _____



15. Four consecutive positive integers have a product of 840. What is the largest of the four integers?

15. _____

16. A combination lock uses three integers in the combination, and the dial is numbered with the integers 0, 1, 2 and 3. If consecutive numbers in the combination cannot be the same, how many possible combinations are there?

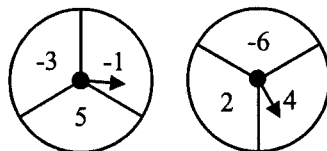
16. _____

17. What is the value of $(2^3)^{\frac{4}{3}}$?

17. _____

18. Two circles with spinners at their centers are divided into three equal regions as shown. When both spinners are spun, what is the probability that the product of the two values is negative? Express your answer as a common fraction.

18. _____



19. How many integers from 100 to 199 inclusive have no consecutive identical digits? (For example, 121 has no consecutive identical digits, but 322 does.) 19. _____

20. A triangle has vertices at coordinates (2, 2), (5, 6) and (6, 2). What is the number of units in the length of the longest side of the triangle? 20. _____

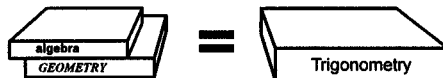
21. The values of a , b , c and d are 1, 2, 3 and 4, though not necessarily in that order. What is the greatest possible value of $a \cdot b + b \cdot c + c \cdot d + d \cdot a$? 21. _____

22. The integer 6 has four positive divisors: 1, 2, 3 and 6. What is the smallest positive integer with exactly five positive divisors? 22. _____

23. Express the following value as a common fraction. 23. _____

$$1 + \frac{1}{1 + \frac{1}{8}}$$

24. Using a balance scale, it was determined that an algebra book and a geometry book together balance a trigonometry book, and two trigonometry books balance three geometry books. How many geometry books are needed to balance four algebra books? 24. _____



25. Bekah has three brass house number digits: 2, 3 and 5. How many distinct numbers can she form using one or more of the digits? 25. _____

26. The average value of nine consecutive integers is 13. What is the sum of the smallest and largest of these integers? 26. _____

27. A non-square rectangle has integer dimensions. The number of square units in its area is numerically equal to the number of units in its perimeter. What is the number of units in the perimeter of this rectangle? 27. _____

28. A wheel of Marci's bike makes 1056 revolutions in 1 mile. What is the number of inches in the diameter of the wheel? Express your answer to the nearest whole number. 28. _____



29. The integer x has 12 factors. The numbers 12 and 15 are factors of x . What is x ? 29. _____

30. A peep increased by 25% is a pop. A pop decreased by 40% is a slug, and a slug increased by 100% is a slap. What percent of a peep is a slap? 30. _____