

1. Find the sum of the first 5 composite numbers.
a. 30 b. 37 c. 39 d. 29
2. If A = the number of sides of an octagon, and B = the number of sides of a decagon, find $AB + B^2 + A$.
a. 188 b. 166 c. 92 d. 126
3. Simplify: $\sqrt{144} - \sqrt{25} + \sqrt{49}$
a. 12 b. 15 c. 14 d. 0
4. If $4a = 160$ and $6b = 3$, find ab .
a. 80 b. 40 c. 60 d. 20
5. Ashli really wants an A in math. If her test scores were 88, 95, 100, 86, and 92, what must she make on her sixth test for her average to be 93?
a. 97 b. 100 c. 95 d. 93
6. Find the difference between the greatest common factor (GCF) and the least common multiple (LCM) of 18 and 90.
a. 18 b. 72 c. 108 d. 90
7. Neal did twice as many sit-ups on Friday as Monday. On Wednesday and Thursday he did equal amounts of sit-ups. He did half as many on Monday as Tuesday. On Wednesday, he decreased his previous number by 5. How many sit-ups did he do from Monday through Friday, if he did ten on Tuesday?
a. 40 b. 25 c. 30 d. 35
8. Beau bought 2 pounds of cashews at \$1.50 a pound. He bought $\frac{1}{2}$ pound of almonds at \$1.00 per pound. What was the average cost per pound of nuts?
a. \$1.40 b. \$1.25 c. \$1.60 d. \$1.75
9. The length of a rectangle is 3 times its width. The area is 48 ft^2 . What is the perimeter of the rectangle?
a. 16 ft. b. 48 ft. c. 28 ft. d. 32 ft.
10. What is the 12th number in the following sequence?
1, 1, 2, 3, 5, 8, 13,...
a. 21 b. 144 c. 55 d. 89
11. What is the probability of rolling a prime number when a fair six-sided number cube is rolled?
a. $\frac{1}{2}$ b. $\frac{1}{3}$ c. $\frac{1}{6}$ d. $\frac{1}{4}$

12. Evaluate: $\left(6\frac{1}{4} \times 5\frac{1}{5} \times \frac{4}{13}\right) \div \frac{5}{6}$

- a. $8\frac{1}{4}$ b. $8\frac{1}{3}$ c. 12 d. $\frac{1}{3}$

13. The price of a \$160 cell phone was reduced by 25%. Later, the sale price was reduced another 25%. What was the final price of the cell phone?

- a. \$90 b. \$120 c. \$40 d. \$80

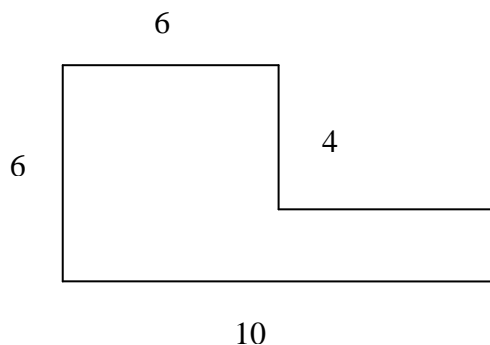
14. By how much does $3^2 + 2^3 + 4^2$ exceed the product of 2, 3, and 4?

- a. 1 b. 2 c. 3 d. 9

15. Simplify: $\frac{\frac{2}{3} - \frac{1}{6}}{\frac{2}{3}}$

- a. $\frac{2}{6}$ b. $\frac{1}{3}$ c. $1\frac{1}{3}$ d. $\frac{3}{4}$

16. Find the area of the figure. Angles that look right are right. Drawing not to scale.

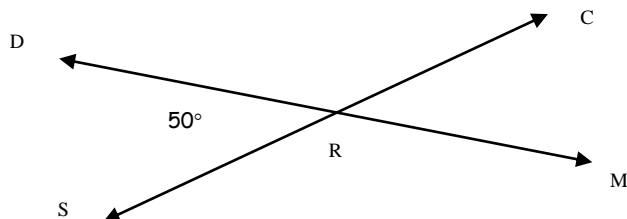


- a. $28 u^2$ b. $44 u^2$ c. $56 u^2$ d. $76 u^2$

17. The time for the first increment was four hundred thousand and three thousand, two hundred fifty hundred-thousandths seconds. The time for the second increment was only three hundred forty-two thousand, fifteen and twenty-five ten thousandths seconds. By how much was the time of the first increment greater?

- a. 57,985.03 b. 57,985.3
c. 157,985.03 d. 58,985.3

18. Find the measurement of $\angle CRM$. Drawing not to scale.



- a. 30° b. 40° c. 50° d. 130°
19. What is 10% of 70% of 650?
a. 45.5 b. 40 c. 65 d. 450
20. Evaluate: $x^2y - \frac{x+z}{x}$ if $x=4$, $y=2$, and $z=10$.
a. 14 b. $12\frac{1}{2}$ c. $28\frac{1}{2}$ d. $29\frac{1}{2}$
21. Solve for x: $9(x + 6) = 144$
a. 54 b. 90 c. 15 d. 10
22. What is the measure of the complement of a 45° angle?
a. 35° b. 45° c. 40° d. 135°
23. Find the sum of the prime factors of 175.
a. 15 b. 17 c. 16 d. 13
24. A regular decagon has a perimeter of 680 cm. What is the length of one side?
a. 68 cm b. 85 m c. 136 cm d. 115 cm
25. Find the product of the perimeter and area of a rectangle with a length of 25 and a width of 5.
a. 75 b. 125 c. 60 d. 7500

Tie Breakers

- #1. Simplify: $16(3-1) + 25 - (4 + 4)^2$
- #2. Brianna's watch stopped at exactly 4:00. What was the measure of the smaller angle formed by the hour and the minute hands?
- #3. If two of the angles of a certain triangle are 35° and 15° , what is the measure of the third angle?