1. Simplify:  $3(4)^2 - 2 + 3(7)$ 

1. 67

2. What is the value of  $\frac{7!}{5!}$ ?

- 2. 42
- 3. An airline company charges \$40 for the first 220-mile leg of a trip and \$80 for a second leg of 380 miles. What is the average cost in dollars per mile of the entire trip?
- 3. 0.20

4. Express as a common fraction:

$$\frac{1}{\frac{1}{2} + \frac{1}{3} + \frac{1}{4}}$$

4. 13

345

5.

Adam mailed a package at the priority mail rate of \$0.25 for the first ounce and \$0.20 for each additional ounce. If he paid \$3.45, how many ounces did the package weigh?

- 6. 0.72
- A 3-cm-by-4-cm-by-2-cm rectangular box is filled with salt. If salt weighs 0.03 kilograms per cubic centimeter, what is the weight in kilograms of the salt in the box? Express your answer as a decimal.
- 7. 4 9.60
- 7. If gasoline costs \$1.20 per gallon, how many dollars will it cost to drive a car 200 miles if it averages 25 miles per gallon?
- 8. 1,980
- 8. If 1% of a shipment of 2,000 light bulbs is defective, how many bulbs in the shipment are not defective?
- 9. |21
- 9. A square and a triangle have equal perimeters. The lengths of the sides of the triangle are 13 cm, 15 cm, and 16 cm. What is the area in square centimeters of the square?
- 10.\_\_\_\_
- 10. In a mile race, Jed beats Ed by 138 yards and Jed beats Ned by 157 yards. When Jed crossed the finish line, by how many yards did Ed lead Ned?
- 11.\_\_\_\_\_
- 11. A particular type of bacteria doubles every 4 hours. If there are 300 bacteria in a mold at the present time, after how many hours will the mold contain 9600 bacteria?

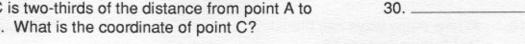
- 25. What is the total surface area, in sq cm, of a 10-cm-by-7-cm-by-5-cm right rectangular prism?
- 25.\_\_
- 26. The product of two integers is -270. Their sum is 21. What are the numbers?
- 26.\_
- 27. How many prime numbers are between 40 and 49?
- 27.

Express in simplest form: 28.

28. \_\_\_\_

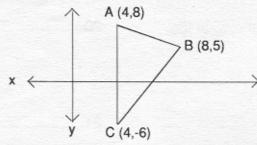
29. Seventeen is 17% of what number?

- 29. \_\_\_\_\_
- 30. Point C is two-thirds of the distance from point A to point B. What is the coordinate of point C?

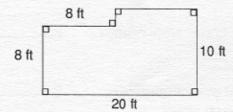


- $\langle \begin{array}{ccc} 0 & & 99 \\ \hline A & & C & B \\ \end{array} \rangle$
- If the four-digit number 57d2 is divisible by 18, what 31. is d?
- 31. \_\_\_\_
- 32. How many distinct prime numbers are factors of 1,650?
- 32. \_\_\_\_\_

33. Find the area of triangle ABC. 33. \_\_\_\_



- 34. What is the area in square feet of this figure?
- 34.\_\_\_



- What three consecutive even integers have a sum of 35. 48?
- 35.\_