$$
\begin{aligned}
& 48-2+21=\begin{array}{l}
46 \\
3(16)
\end{array} \\
& 21
\end{aligned}
$$

1. Simplify: $3(4)^{2}-2+3(7)$
2. What is the value of $\frac{7!}{5!}$ ?
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?
4. Express as a common fraction: $\frac{1}{\frac{1}{2}+\frac{1}{3}+\frac{1}{4}}$
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. A $3-\mathrm{cm}-\mathrm{by}-4-\mathrm{cm}-\mathrm{by}-2-\mathrm{cm}$ 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. 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. If $1 \%$ of a shipment of 2,000 light bulbs is defective, how many bulbs in the shipment are not defective?
9. A square and a triangle have equal perimeters. The lengths of the sides of the triangle are $13 \mathrm{~cm}, 15 \mathrm{~cm}$, and 16 cm . What is the area in square centimeters of the square?
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. 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?
12. What is the total surface area, in sq cm, of a $10-\mathrm{cm}$-by-$7-\mathrm{cm}-\mathrm{by}-5-\mathrm{cm}$ right rectangular prism?
13. The product of two integers is -270 . Their sum is 21 . What are the numbers?
14. How many prime numbers are between 40 and 49 ?
15. Express in simplest form: $\frac{\frac{1}{2}+\frac{1}{3}}{\frac{1}{2}-\frac{1}{3}}$
16. Seventeen is $17 \%$ of what number?
17. Point C is two-thirds of the distance from point A to point $B$. What is the coordinate of point $C$ ?

18. If the four-digit number 57 d 2 is divisible by 18 , what is $d$ ?
19. How many distinct prime numbers are factors of 1,650 ?
20. Find the area of triangle $A B C$.
21. $\qquad$
$x$

22. What is the area in square feet of this figure?
23. $\qquad$

24. What three consecutive even integers have a sum of
25. $\qquad$ 48?
