EXERCISES

Solve each equation for the indicated variable.

1. $x+y=5$, for y

2. $x+y=5$, for x

3. $x-y=5$, for x

4. $x-y=5$, for y

5. $2x+y=10$, for y

6. $2x+y=10$, for x

7. $-2x+y=10$, for y

8. $2x-y=10$, for x

9. $2x-4y=-5$, for y

10. $2a+b=c$, for b

11. $2a+b=c$, for a

12. $2a+2b=c$, for a

13. $a-b=3a+b$, for a

14. $ax=a-2$, for x

15. $ax=a+2$, for a

16. If $\frac{a}{b}=1$, then $a-b=?$

17. The formula for the circumference of a circle is $C=2\pi r$, where $\pi \approx 3.14$, and r is the radius.

a. Solve the formula for r.

b. Find the radius of a circle with a circumference of 4 meters.

18. The formula for the area of a triangle is $A=\frac{1}{2}bh$, where b is the base, and h is the height.

a. Solve the formula for h.

b. Find the height of a triangle if $A=20\,ft^2$, $b=5\,ft$.

19. The formula for the perimeter of a rectangle is $p=2(l+w)$, where l is the length, and w is the width.

a. Solve the formula for l.

b. Find the length of a rectangle if $p=88\ cm$, $w=16\ cm$.

20. The formula for the distance traveled in a single direction at a constant speed is $d=rt$, where r is the speed (rate), and t is the time traveled.

a. Solve the formula for r.

b. If a plane left an airport at a constant speed to a distance of 1,950 miles in three hours, what is its speed ?

21. The formula for the volume of a pyramid is $V=\frac{1}{3}bh$, where b is the area of the base, and h is the height. Solve the formula for h.

22. The formula for the total surface area of a right circular cylinder is $A=2\pi r h+2\pi r^2$, where r is the radius of the circular base and top, and h is the height of the cylinder. Solve the formula for h.