

LESSON
3.8**Practice B**

For use with pages 184–189

Write the equation in function form.

1. $4x + y = -10$

2. $6 - y = 17x$

3. $y - 3x - 11 = 0$

4. $2x + 2y = 8$

5. $6x - 3y = 12$

6. $16 - 8y = 4x$

7. $5x - 7y = 14$

8. $9y - 4x - 9 = 0$

9. $15 + 3y = -24x$

10. $4 + 6y = 12x - 2$

11. $4 - 10y = 22 - 6x$

12. $8x - 2y - 5 = 11$

Solve the literal equation.

13. Solve $R = R_1 + R_2$ for R_2 .

14. Solve $I = Prt$ for r .

15. Solve $C = \frac{Q}{V}$ for V .

16. Solve $y = mx + b$ for m .

Solve the formula for the indicated variable.

17. Area of a trapezoid: $A = \frac{h}{2}(b_1 + b_2)$. Solve for h .

18. Area of a rhombus: $A = \frac{1}{2}d_1d_2$. Solve for d_1 .

19. **Guitar Practice** You practice playing your guitar every day. You spend 15 minutes practicing chords and the rest of the time practicing a new song. So the total number of minutes y you practice for the week is given by $y = 7(15 + x)$, where x is the number of minutes you spend on practicing a new song.

- Solve the equation for x .
- How many minutes did you spend on a new song if you practiced 210 minutes last week? 245 minutes? 315 minutes?

20. **Discounts** Solve for r in the formula $S = L - rL$ where S is the sale price, L is the list price, and r is the discount rate.

- An item with a list price of \$128 goes on sale for \$51.20. Find the discount rate.
- An item with a list price of \$56.80 goes on sale for \$36.92. Find the discount rate.

21. **Cookbook** You bought a cookbook while on a recent trip overseas. All of the oven temperatures are in degrees Celsius and the only formula you can remember for temperature is how to convert Fahrenheit to Celsius: $C = \frac{5}{9}(F - 32)$.

- Solve the equation for F .
- A recipe tells you to bake a pie in the oven at 149°C . What is this temperature in degrees Fahrenheit? Round your answer to the nearest whole degree.