

## Practice 7.2

Evaluate each expression for the given value of the variable.

1  $x + x + 5$  when  $x = 7$

2  $3x + 5$  when  $x = 5$

3  $5y - 8$  when  $y = 3$

4  $40 - 9y$  when  $y = 2$

5  $33 - 7w + 6$  when  $w = 4$

6  $\frac{7w}{6}$  when  $w = 18$

7  $4 + \frac{5z}{6}$  when  $z = 12$

8  $\frac{4+5z}{6}$  when  $z = 12$

9  $20 - \frac{4r}{5}$  when  $r = 10$

10  $\frac{8r}{9} - 15$  when  $r = 27$

11  $16 - \frac{2z - 4}{3}$  when  $z = 18$

12  $16 - \frac{2z}{3} - 4$  when  $z = 18$

Evaluate each expression when  $x = 3$ .

13  $\frac{x+1}{2} + \frac{5x-3}{10}$

14  $\frac{11+x}{2} - \frac{9x-3}{4}$

15  $\frac{7x-6}{3} + 4(8+2x)$

16  $13(11-3x) - \frac{5(16-4x)}{2}$

17  $5(x+2) + 2(6-x) + \frac{2x+3}{3}$

18  $\frac{5x-3}{4} + \frac{5(x+5)}{8} + 3(13-2x)$

19  $\frac{2x+4}{5} - \frac{x+1}{4} + \frac{x}{6}$

20  $7x - \frac{x}{5} + \frac{7-x}{9}$

Evaluate each of the following when  $y = 7$ .

21  $(5y + 2)$  minus  $(2y + 5)$ .

22 The sum of  $\frac{y}{3}$  and  $\frac{4y}{9}$ .

23 The product of  $(y + 1)$  and  $(y - 1)$ .

24  $8(2y - 1)$  minus  $\frac{14y + 37}{5}$ .

25 The quotient of  $9(7y - 15)$  and  $\frac{110 - 6y}{4}$ .

26 The sum of  $\frac{5y}{6}$  and  $4\left(\frac{3y}{7} + 2y\right)$ .

27 The quotient of  $\left(\frac{y}{2} + \frac{2y}{3}\right)$  and  $\left(\frac{5y}{6} - \frac{y}{3}\right)$ .