4.3 Page 251.

4. Goal: Isolate \( b \).

\[ 5b - 1 = 19 \]
\[ 5b - 1 + 1 = 19 + 1 \]
\[ 5b = 20 \]
\[ \frac{5b}{5} = \frac{20}{5} \]
\[ b = 4 \]

10. Goal: Isolate \( n \).

\[ \frac{n}{7} - 4 = 5 \]
\[ \frac{n}{7} - 4 + 4 = 5 + 4 \]
\[ \frac{n}{7} = 9 \]
\[ \frac{n}{7} \cdot 7 = 9 \cdot 7 \]
\[ n = 63 \]

6. 29 = 8w - 3
\[ 29 + 3 = 8w - 3 + 3 \]
\[ 32 = 8w \]
\[ \frac{32}{8} = \frac{8w}{8} \]
\[ 4 = w \text{ OR } w = 4 \]

12. 2 + \frac{u}{6} = 8 \]
\[ 2 - 2 + \frac{u}{6} = 8 - 2 \]
\[ \frac{u}{6} = 6 \]
\[ \frac{u}{6} \cdot 6 = 6 \cdot 6 \]
\[ u = 36 \]

16. 4(s - 6) = 16
\[ \frac{4(s-6)}{4} = \frac{16}{4} \]
\[ s - 6 = 4 \]
\[ s = 10 \]

18. 28 = 7(3 + g)
\[ \frac{28}{7} = \frac{7(3+g)}{7} \]
\[ 4 = (3 + g) \]
\[ 4 - 3 = 3 - 3 + g \]
\[ 1 = g \text{ OR } g = 1 \]

26. The distance traveled divided by the time elapsed.
\( d \) : The distance traveled.
\( t \) : the time elapsed.
\[ d \div t = \frac{d}{t} = \frac{1}{t} \cdot d = d : t \]

28. The difference between the height of the roof and the height of the tree.
\( r \) : the height of the roof.
\( t \) : the height of the tree.
\[ r - t \]

30. The product of the number of students and $3 more than last year’s entrance fee.
\( s \) : the number of students.
\( f \) : last year’s entrance fee.
\[ s \cdot (3 + f) \]

32. The sum of your business expenses and 29% of your medical expenses.
\( b \) : The sum of your business expenses.
\( m \) : your medical expenses.
\[ b + 29\% \cdot m = b + 0.29m = b + \frac{29}{100}m \]