

Additional Exercises 5.7

Name: _____

Date: _____

Example 1: Solve. $x + 0.35 = 1.6$

$$\begin{aligned}x + 0.35 &= 1.6 && \text{Subtract 0.35 from both sides of the equation.} \\x + 0.35 - 0.35 &= 1.6 - 0.35 \\x &= 1.25\end{aligned}$$

Example 2: Solve. $3x + 2.5 = 2x - 3.6$

$$\begin{aligned}3x + 2.5 &= 2x - 3.6 && \text{Subtract } 2x \text{ from both sides of the equation.} \\3x + 2.5 - 2x &= 2x - 3.6 - 2x \\x + 2.5 &= -3.6 && \text{Subtract 2.5 from both sides of the equation.} \\x + 2.5 - 2.5 &= -3.6 - 2.5 \\x &= -6.1\end{aligned}$$

Exercises

Solve and check. (Round answers to the nearest thousandth if needed.)

1. $x + 0.7 = 5$ 1. _____
2. $2.9 = y - 3.75$ 2. _____
3. $1.1x = 6.6$ 3. _____
4. $\frac{1x}{5} = 3.285$ 4. _____
5. $3x = 1.5$ 5. _____
6. $3(x - 2.1) = 2x - 6.9$ 6. _____
7. $5x - 2x = 0.192$ 7. _____
8. $x - 0.5x = -18.5$ 8. _____
9. $2(x - 4) = 8.62$ 9. _____
10. $1.5x - 9.72 = 0.5x + 8.65$ 10. _____
11. $2(x - 1.5) = 8.352$ 11. _____
12. $4x + 7.12 = 2(3x - 5.8)$ 12. _____
13. $0.25x = 17.75$ 13. _____
14. $\frac{x}{12} = 3.7$ 14. _____
15. $x - 2.9 = 6.85$ 15. _____
16. $2x + 0.5x = -125$ 16. _____
17. $-3.3x = -99$ 17. _____
18. $-0.2x + 3.75 = -9.56$ 18. _____
19. $4x - 2.78 = 5x - 9.62$ 19. _____
20. $\frac{x}{0.23} = 0.6$ 20. _____