0.1 Solving Simple Equations Practice Answers

Directions: Solve for the unknown variable. Show your work as it was described in the video.

1. \[15 = 2x - 10\]
   \[+10 \quad +10\]
   \[\frac{25}{2} = \frac{2x}{2}\]
   \[\frac{25}{2} = x\]

2. \[15 + 2x = -10\]
   \[-\frac{15}{2x} = -\frac{25}{2}\]
   \[\frac{2x}{2} = -\frac{25}{2}\]
   \[x = -12.5\]

3. \[6 \cdot 80 = \frac{w}{6} \cdot 6\]
   \[480 = w\]

4. \[\frac{g + 2}{-6} = 8.5 \cdot 6\]
   \[\frac{g + 2}{-2} = 51\]
   \[g = 49\]

5. \[\frac{g}{6} + 2 = 8.5\]
   \[\frac{g}{6} = 6.5 \cdot 6\]
   \[g = 39\]

6. \[d - 5 = 15\]
   \[+5 \quad +5\]
   \[d = 20\]

7. \[3k - 6 = 12\]
   \[\frac{3k + 6}{3} = \frac{18}{3}\]
   \[k = 6\]

8. \[6h - 3 = 57\]
   \[\frac{6h + 3}{6} = \frac{60}{6}\]
   \[h = 10\]

9. \[\frac{d - g}{6} = 15\]
   \[\frac{-g}{6} = 20\]
   \[g = -120\]

10. \[4 \cdot 3 = \frac{q - 12}{4} \cdot 4\]
    \[12 = 9 - 12\]
    \[+12\]
    \[24 = q\]

11. \[-42 = 6 - 8h\]
    \[\frac{-48}{-8} = \frac{-8h}{-8}\]
    \[6 = h\]

12. \[9.9 = \frac{d}{4.4} + 1.1\]
    \[8.8 = \frac{d}{4.4}\]
    \[38.72 = d\]

13. \[-\frac{p}{6} = 4\]
    \[-\frac{p}{6} + 4 = -6\]
    \[p = -24\]

14. \[0.8 - t = 4.1\]
    \[0.8 - 0.8 = 3.3\]
    \[t = -3.3\]

15. \[32 = 12z - 26z\]
    \[\frac{-4z}{-14} = \frac{z}{14}\]
    \[z = \frac{-16}{-4}\]

16. \[(0.8) \cdot -9 = \frac{3d}{0.8} \cdot (0.8)\]
    \[-7.2 = 3d\]
    \[\frac{3d}{3} = \frac{3d}{3}\]
    \[-24 = d\]

17. \[5g - 10 + 3g = 0\]
    \[8g - 10g = 0\]
    \[\frac{8g}{8} = \frac{10}{8}\]
    \[g = \frac{10}{8} = \frac{5}{4}\]

18. \[42 = \frac{d}{0.1} - 5\]
    \[\frac{47}{0.1} = \frac{d}{0.1} \cdot (0.1)\]
    \[4.7 = d\]