0.1 Solving Simple Equations Practice Answers

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

1. $15 = 2x - 10$

$+10 \quad +10$

$\frac{25}{2} = \frac{2x}{2}$

$12.5 = x$

2. $15 + 2x = -10$

$-15 \quad -15$

$\frac{2x}{2} = \frac{-25}{2}$

$x = -12.5$

3. $6 \cdot 80 = \frac{w}{6} \cdot 6$

$480 = w$

4. $6 \cdot \frac{g+2}{6} = 8.5 \cdot 6$

$g + 2 = 51$

$-2 \quad -2$

$g = 49$

5. $\frac{g}{6} + 2 = 8.5$

$-2 \quad -2$

$6 \cdot \frac{g}{6} = 6.5 \cdot 6$

$g = 39$

6. $d - 5 = 15$

$+5 \quad +5$

$d = 20$

7. $3k - 6 = 12$

$+6 \quad +6$

$\frac{3k}{3} = \frac{18}{3}$

$K = 6$

8. $6h - 3 = 57$

$+3 \quad +3$

$\frac{6h}{6} = \frac{60}{6}$

$h = 10$

9. $-5 - \frac{g}{6} = 15$

$+5 \quad +5$

Put negative in bottom

$\frac{-g}{6} = 20$

$-6 \cdot \frac{g}{-6} = 20 \cdot -6$

$g = -120$

10. $4 \cdot 3 = \frac{q-12}{4} \cdot 4$

$12 = q - 12$

$+12 \quad +12$

$24 = q$

11. $-42 = 6 - 8h$

$-6 \quad -6$

$\frac{-48}{-8} = \frac{-8h}{-8}$

$6 = h$

12. $9.9 = \frac{d}{4.4} + 1.1$

$-1.1 \quad -1.1$

$8.8 = \frac{d}{4.4}$

$38.72 = d$

13. $-\frac{p}{6} = 4$

Put negative in bottom

$-6 \cdot \frac{p}{-6} = 4 \cdot -6$

$P = -24$

14. $0.8 - t = 4.1$

$-0.8 \quad -0.8$

$\frac{-t}{-1} = \frac{3.3}{-1}$

$t = -3.3$

15. $32 = 12z - 26z$

$32 = -14z$

$\frac{32}{-14} = \frac{-14z}{-14}$

$\frac{32}{-14} = z$

$z = \frac{32}{-14} = -\frac{16}{7}$

16. $(0.8) \cdot -9 = \frac{3d}{0.8} \cdot (0.8)$

$\frac{-7.2}{3} = \frac{3d}{3}$

$-2.4 = d$

17. $5g - 10 + 3g = 0$

$8g - 10 = 0$

$+10 \quad +10$

$\frac{8g}{8} = \frac{10}{8}$

$g = \frac{10}{8} = \frac{5}{4}$

18. $42 = \frac{d}{0.1} - 5$

$+5 \quad +5$

$(0.1) \cdot 47 = \frac{d}{0.1} \cdot (0.1)$

$4.7 = d$