

Two-Step Equations Worksheet Answer Key

Left Foot, Right Foot, Left Foot, Pause

1.

$$\begin{aligned}\frac{-a+9}{12} &= 2 \\ -a+9 &= 24 \\ -a &= 15 \\ a &= -15\end{aligned}$$

3.

$$\begin{aligned}\frac{45-15}{x+2} &= 5 \\ 30 &= 5x+10 \\ 20 &= 5x \\ x &= 4\end{aligned}$$

2.

$$\begin{aligned}5w+4-11w &= |2| \\ -6w+4 &= |2|\end{aligned}$$

4.

$$\begin{aligned}3x-5 &= 2x-12 \\ x &= -7\end{aligned}$$

5.

$$\begin{array}{ll}-6w+4=2 & -6w+4=-2 \\ -6w=-2 & -6w=-6 \\ w=\frac{1}{3} & w=1\end{array}$$

$$\begin{aligned}4x+12 &= 2x+6 \\ 2x &= -6 \\ x &= -3\end{aligned}$$

$$w = \frac{1}{3}, 1$$

6.

$$\begin{aligned}4y+3 &= 5y+2 \\ y+2 &= 3 \\ y &= 1\end{aligned}$$

9.

$$4y = 2y + 7$$

$$2y = 7$$

$$y = \frac{7}{2} = 3\frac{1}{2}$$

7.

$$\frac{4k+2}{k} = 2$$

$$4k+2 = 2k$$

$$2k = -2$$

10.

$$6 - 7y = 2(-4)y + 1$$

$$6 - 7y = -8y + 1$$

$$5 = -y$$

$$y = -5$$

8.

$$2a + 8 = 9a + 4$$

$$4 = 7a$$

$$a = \frac{4}{7}$$