

Basic Two-step Equations with Unknown on One Side

Date:

Name:

Through your working, show how you are keeping the equation balanced as you solve for the variable. Round to 1 d.p. if necessary.

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[1]

$$4.5m + 23 = 54.5$$

[2]

$$3.2m + 10 = 35.6$$

[3]

$$26.6 = 3.4m + 13$$

[4]

$$7m - 15 = 27.7$$

[5]

$$6m - 18 = 120.6$$

[6]

$$55.8 = 6m - 18$$

[7]

$$-10.1m + 23 = -27.5$$

[8]

$$11.8m + 12 = -71$$

[9]

$$0.8 = -3.4m + 11$$

[10]

$$7m - 10.7 = -52.7$$

[11]

$$10m - 22 = -238$$

[12]

$$144.9 = 9m - 18$$

Through your working, show how you are keeping the equation balanced as you solve for the variable. Round to 1 d.p. if necessary.

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$$\begin{aligned} [1] \quad 4.5m + 23 &= 54.5 \\ - 23 & \quad - 23 \end{aligned}$$

$$4.5m = 31.5$$

$$\div 4.5 \quad \div 4.5$$

$$m = 7.0$$

$$\begin{aligned} [2] \quad 3.2m + 10 &= 35.6 \\ - 10 & \quad - 10 \end{aligned}$$

$$3.2m = 25.6$$

$$\div 3.2 \quad \div 3.2$$

$$m = 8.0$$

$$\begin{aligned} [3] \quad 26.6 &= 3.4m + 13 \\ - 13 & \quad - 13 \end{aligned}$$

$$13.6 = 3.4m$$

$$\div 3.4 \quad \div 3.4$$

$$4.0 = m$$

$$m = 4.0$$

$$\begin{aligned} [4] \quad 7m - 15 &= 27.7 \\ + 15 & \quad + 15 \end{aligned}$$

$$7m = 42.7$$

$$\div 7 \quad \div 7$$

$$m = 6.1$$

$$\begin{aligned} [5] \quad 6m - 18 &= 120.6 \\ + 18 & \quad + 18 \end{aligned}$$

$$6m = 138.6$$

$$\div 6 \quad \div 6$$

$$m = 23.1$$

$$\begin{aligned} [6] \quad 55.8 &= 6m - 18 \\ + 18 & \quad + 18 \end{aligned}$$

$$73.8 = 6m$$

$$\div 6 \quad \div 6$$

$$12.3 = m$$

$$m = 12.3$$

$$\begin{aligned} [7] \quad -10.1m + 23 &= -27.5 \\ &\quad - 23 \quad - 23 \end{aligned}$$

$$-10.1m = -50.5$$

$$\div -10.1 \quad \div -10.1$$

$$m = 5.0$$

$$\begin{aligned} [8] \quad 11.8m + 12 &= -71.0 \\ &\quad - 12 \quad - 12 \end{aligned}$$

$$11.8m = -83$$

$$\div 11.8 \quad \div 11.8$$

$$m = -7$$

$$\begin{aligned} [9] \quad 0.8 &= -3.4m + 11 \\ &\quad - 11 \quad - 11 \end{aligned}$$

$$-10 = -3.4m$$

$$\div -3.4 \quad \div -3.4$$

$$3.0 = m$$

$$m = 3.0$$

$$\begin{aligned} [10] \quad 7m - 10.7 &= -52.7 \\ &\quad + 10.7 \quad + 10.7 \end{aligned}$$

$$7m = -42$$

$$\div 7 \quad \div 7$$

$$m = -6.0$$

$$\begin{aligned} [11] \quad 10m - 22 &= -238 \\ &\quad + 22 \quad + 22 \end{aligned}$$

$$10m = -216$$

$$\div 10 \quad \div 10$$

$$m = -21.6$$

$$\begin{aligned} [12] \quad 144.9 &= 9m - 18 \\ &\quad + 18 \quad + 18 \end{aligned}$$

$$162.9 = 9m$$

$$\div 9 \quad \div 9$$

$$18.1 = m$$

$$m = 9.0$$