

Math 7 p 473 #1-6, p 463 #19-20

① $3x + 1 = 10$

$$\begin{array}{r} 3x + 1 = 10 \\ -1 \quad -1 \\ \hline 3x = 9 \end{array}$$

$$\frac{3x}{3} = \frac{9}{3}$$

$x = 3$

$$\begin{array}{r} 3x + 1 = 10 \\ \hline 3(3) + 1 \\ 9 + 1 \\ 10 \end{array} \quad \begin{array}{l} \downarrow \\ \neq 10 \checkmark \end{array}$$

② $-3 + 8n = -5$

$$\begin{array}{r} -3 + 8n = -5 \\ +3 \quad +3 \\ \hline 8n = -2 \end{array}$$

$$\frac{8n}{8} = \frac{-2}{8}$$

$n = -\frac{1}{4}$

$$-\frac{2}{8} \div 2 = -\frac{1}{4}$$

$$\frac{8}{1} \cdot -\frac{1}{4} = -2$$

$$-3 + 8n = -5$$

$$\begin{array}{r} -3 + 8(-\frac{1}{4}) \\ -3 + 8 \cdot -\frac{1}{4} \\ -3 + -2 \\ -5 \end{array} \quad \begin{array}{l} \downarrow \\ -5 \end{array}$$

③ $4h - 6 = 22$

$$\begin{array}{r} 4h - 6 = 22 \\ +6 \quad +6 \\ \hline 4h = 28 \end{array}$$

$$4h = 28$$

$$\frac{4h}{4} = \frac{28}{4}$$

$h = 7$

$$4h - 6 = 22$$

$$\begin{array}{r} 4 \cdot 7 - 6 \\ 28 - 6 \\ 22 \end{array} \quad \begin{array}{l} \downarrow \\ 22 \checkmark \end{array}$$

④ $-8s + 1 = 33$

$$\begin{array}{r} -8s + 1 = 33 \\ -1 \quad -1 \\ \hline -8s = 32 \end{array}$$

$$\frac{-8s}{-8} = \frac{32}{-8}$$

$s = -4$

$$-8s + 1 = 33$$

$$\begin{array}{r} -8(-4) + 1 \\ 32 + 1 \\ 33 \end{array} \quad \begin{array}{l} \downarrow \\ \neq 33 \checkmark \end{array}$$

