

Mixed Equations

Name: _____ Date: _____



Solve the equations.

(1) $1 = -3x + 2(2x + 3)$

(2) $-7x + 4(x - 3) = 18$

(3) $3x + 5(-x - 2) = -20$

(4) $4x - 5(-x + 3) = 48$

(5) $-5x + 2(2x + 2) = -3$

(6) $-2x - 2(2x - 2) = 40$

(7) $-6x + 4(3x - 3) = 18$

(8) $4x - 3(x + 3) = -20$

(9) $7x + 5(-2x + 3) = -12$

(10) $5x - 2(2x + 4) = -13$

Mixed Equations

ANSWER KEY



Solve the equations.

$$\begin{aligned}(1) \quad 1 &= -3x + 2(2x + 3) \\ 1 &= -3x + 4x + 6 \\ 1 &= x + 6 \\ -5 &= x \\ -5 &= x\end{aligned}$$

$$\begin{aligned}(2) \quad -7x + 4(x - 3) &= 18 \\ -7x + 4x - 12 &= 18 \\ -3x - 12 &= 18 \\ -3x &= 30 \\ x &= -10\end{aligned}$$

$$\begin{aligned}(3) \quad 3x + 5(-x - 2) &= -20 \\ 3x - 5x - 10 &= -20 \\ -2x - 10 &= -20 \\ -2x &= -10 \\ x &= 5\end{aligned}$$

$$\begin{aligned}(4) \quad 4x - 5(-x + 3) &= 48 \\ 4x + 5x - 15 &= 48 \\ 9x - 15 &= 48 \\ 9x &= 63 \\ x &= 7\end{aligned}$$

$$\begin{aligned}(5) \quad -5x + 2(2x + 2) &= -3 \\ -5x + 4x + 4 &= -3 \\ -x + 4 &= -3 \\ -x &= -7 \\ x &= 7\end{aligned}$$

$$\begin{aligned}(6) \quad -2x - 2(2x - 2) &= 40 \\ -2x - 4x + 4 &= 40 \\ -6x + 4 &= 40 \\ -6x &= 36 \\ x &= -6\end{aligned}$$

$$\begin{aligned}(7) \quad -6x + 4(3x - 3) &= 18 \\ -6x + 12x - 12 &= 18 \\ 6x - 12 &= 18 \\ 6x &= 30 \\ x &= 5\end{aligned}$$

$$\begin{aligned}(8) \quad 4x - 3(x + 3) &= -20 \\ 4x - 3x - 9 &= -20 \\ x - 9 &= -20 \\ x &= -11 \\ x &= -11\end{aligned}$$

$$\begin{aligned}(9) \quad 7x + 5(-2x + 3) &= -12 \\ 7x - 10x + 15 &= -12 \\ -3x + 15 &= -12 \\ -3x &= -27 \\ x &= 9\end{aligned}$$

$$\begin{aligned}(10) \quad 5x - 2(2x + 4) &= -13 \\ 5x - 4x - 8 &= -13 \\ x - 8 &= -13 \\ x &= -5 \\ x &= -5\end{aligned}$$