

Mixed Equations

Name: _____ Date: _____



Solve the equations.

(1) $-6x - 44 = 14 - 4x$

(2) $-10x + 100 = -54 + x$

(3) $88 - 6x = 4x - 102$

(4) $53 + 11x = 3x - 43$

(5) $-5x - 35 = 17 - 7x$

(6) $-17 + 5x = 8x + 34$

(7) $-93 + 7x = x + 69$

(8) $-21 + x = -4x + 39$

(9) $6x - 35 = 10x + 65$

(10) $-132 + 4x = -5x + 84$

(11) $2x + 30 = 7x - 100$

(12) $-30 - 5x = 20 - 3x$

Mixed Equations ANSWER KEY



Solve the equations.

$$(1) \quad -6x - 44 = 14 - 4x$$

$$\begin{aligned} -44 - 2x &= 14 \\ -2x &= 58 \\ x &= -29 \end{aligned}$$

$$(2) \quad -10x + 100 = -54 + x$$

$$\begin{aligned} 100 &= -54 + 11x \\ 154 &= 11x \\ 14 &= x \end{aligned}$$

$$(3) \quad 88 - 6x = 4x - 102$$

$$\begin{aligned} 88 &= -102 + 10x \\ 190 &= 10x \\ 19 &= x \end{aligned}$$

$$(4) \quad 53 + 11x = 3x - 43$$

$$\begin{aligned} 53 &= -43 - 8x \\ 96 &= -8x \\ -12 &= x \end{aligned}$$

$$(5) \quad -5x - 35 = 17 - 7x$$

$$\begin{aligned} -35 + 2x &= 17 \\ 2x &= 52 \\ x &= 26 \end{aligned}$$

$$(6) \quad -17 + 5x = 8x + 34$$

$$\begin{aligned} -17 - 3x &= 34 \\ -3x &= 51 \\ x &= -17 \end{aligned}$$

$$(7) \quad -93 + 7x = x + 69$$

$$\begin{aligned} -93 + 6x &= 69 \\ 6x &= 162 \\ x &= 27 \end{aligned}$$

$$(8) \quad -21 + x = -4x + 39$$

$$\begin{aligned} -21 + 5x &= 39 \\ 5x &= 60 \\ x &= 12 \end{aligned}$$

$$(9) \quad 6x - 35 = 10x + 65$$

$$\begin{aligned} -35 - 4x &= 65 \\ -4x &= 100 \\ x &= -25 \end{aligned}$$

$$(10) \quad -132 + 4x = -5x + 84$$

$$\begin{aligned} -132 + 9x &= 84 \\ 9x &= 216 \\ x &= 24 \end{aligned}$$

$$(11) \quad 2x + 30 = 7x - 100$$

$$\begin{aligned} 30 &= -100 + 5x \\ 130 &= 5x \\ 26 &= x \end{aligned}$$

$$(12) \quad -30 - 5x = 20 - 3x$$

$$\begin{aligned} -30 - 2x &= 20 \\ -2x &= 50 \\ x &= -25 \end{aligned}$$