

$$\begin{aligned} 11x + 9 &= 2x \\ -11x & \quad -11x \\ 9 &= -9x \\ \frac{9}{-9} &= \frac{-9x}{-9} \\ -1 &= x \end{aligned}$$

$$\begin{aligned} 11x + 10 &= 4x - 11 \\ -10 & \quad -10 \\ 11x &= 4x - 21 \\ -4x & \quad -4x \\ 7x &= -21 \\ \frac{7x}{7} &= \frac{-21}{7} \\ x &= -3 \end{aligned}$$

$$\begin{aligned} 99(1+x) &= 204 - 12x \\ 99 + 99x &= 204 - 12x \\ +12x & \quad +12x \\ 99 + 21x &= 204 \\ 21x &= 105 \\ \frac{21x}{21} &= \frac{105}{21} \\ x &= 5 \end{aligned}$$

$$\begin{aligned} 6 &= 2(a - 3x) + 6x \\ 6 &= 18 - 6x + 6x \\ 6 &\neq 18 \\ \text{No solution} \end{aligned}$$

$$\begin{aligned} 5 - 3(x+3) &= -2(5x+2) \\ 5 - 3x - 9 &= -10x - 4 \\ +3x & \quad +3x \\ 5 - 9 &= -7x - 4 \\ +4 & \quad +4 \\ 0 &= -7x \\ \frac{0}{-7} &= \frac{-7x}{-7} \\ 0 &= x \end{aligned}$$

$$\begin{aligned} 6x - 2 &= 4x + 4 + 2 \\ 6x - 2 &= 4x + 6 \\ -4x & \quad -4x \\ 2x - 2 &= 6 \\ \frac{2x}{2} &= \frac{8}{2} \\ x &= 4 \end{aligned}$$

$$\begin{aligned} -10(1-6x) + 30 &= -700 \\ -10 + 60x + 30 &= -700 \\ 20 + 60x &= -700 \\ -20 & \quad -20 \\ 60x &= -720 \\ \frac{60x}{60} &= \frac{-720}{60} \\ x &= -12 \end{aligned}$$

$$\begin{aligned} 26 - 5x &= 1x \\ +5x & \quad +5x \\ 26 &= 6x \\ \frac{26}{6} &= \frac{6x}{6} \\ \frac{13}{3} &= x \\ 2 &= x \end{aligned}$$

$$\begin{aligned} 2(1-8x) + 29 &= 13(x+2) \\ 2 - 16x + 29 &= 13x + 26 \\ 31 - 16x &= 13x + 26 \\ +16x & \quad +16x \\ 31 &= 29 + 29x \\ 31 - 29 &= 29x \\ 2 &= 29x \\ \frac{2}{29} &= x \end{aligned}$$

$$\begin{aligned} 2(3x+8) + 3x &= -116 \\ 6x + 16 + 3x &= -116 \\ 9x + 16 &= -116 \\ -16 & \quad -16 \\ 9x &= -132 \\ \frac{9x}{9} &= \frac{-132}{9} \\ x &= -14.67 \end{aligned}$$

$$\textcircled{10} \quad 6x - 16 = 7x + 3x$$

$$6x - 16 = 10x$$

$$-16 = 4x$$

$$-4 = x$$

$$\textcircled{6} \quad -9(x+20) - 19(x-4) = -36x$$

$$-9x - 180 - 19x + 76 = -36x$$

$$-28x - 104 = -36x + 28x$$

$$-104 = -8x$$

$$13 = x$$

$$\textcircled{11} \quad 6(x-10) = 57 - 7x$$

$$6x - 60 = 57 - 7x$$

$$6x = 117 - 7x$$

$$13x = 117$$

$$x = 9$$

$$\begin{array}{r} 6x \\ + 7x \\ \hline 13x \\ \times 9 \\ \hline 117 \end{array}$$

$$\textcircled{12} \quad 60 + 14x = 3(2 + 6x)$$

$$60 + 14x = 36 + 18x$$

$$\textcircled{11} \quad 60 = 36 + 8x$$

$$24 = 8x$$

$$3 = x$$

$$\textcircled{13} \quad -7(10 + 2x) = 6 - 20(x - 4)$$

$$-70 - 14x = 6 - 20x + 80$$

$$-70 - 14x = 86 - 20x$$

$$6x = 156$$

$$x = 26$$

$$\textcircled{15} \quad 12(9 - 6x) = 696 - 12$$

$$108 - 72x = 684$$

$$-72x = 576$$

$$x = -8$$

$$\begin{array}{r} 172 \\ \times 8 \\ \hline 576 \end{array}$$

$$\textcircled{16} \quad 12 + 8x = -4(x - 6)$$

$$12 + 8x = -4x + 24$$

$$-8x + 8x = -4x - 8x$$

$$-12 = -12x$$

$$1 = x$$

$$\textcircled{17} \quad 4 - 6x = 12 - 7x$$

$$-6x = 12 - 7x$$

$$x = 12$$

$$\textcircled{18} \quad -3x + 6 = -10 - 11x + 13x$$

$$6 = -10 + 2x$$

$$16 = 2x$$

$$8 = x$$