

$$\begin{aligned} \textcircled{1} \quad 3(2d-7) &= (2+4d)2 \\ 6d-21 &= 4+8d \\ -2d-21 &= 4 \\ -2d &= 25 \\ d &= \frac{-25}{2} \end{aligned}$$

$$\begin{aligned} \textcircled{3} \quad -3(2x+4) &= 3(x-6) \\ -6x-12 &= 3x-18 \\ -9x-12 &= -18 \\ -9x &= -6 \\ x &= \frac{6}{9} \\ x &= \frac{2}{3} \end{aligned}$$

$$\begin{aligned} \textcircled{5} \quad 4-(2x-3) &= 3(x+1) \\ 4-2x+3 &= 3x+3 \\ 7-2x &= 3x+3 \\ 7-5x &= 3 \\ -5x &= -4 \\ x &= \frac{4}{5} \end{aligned}$$

$$\begin{aligned} \textcircled{7} \quad 5(x-7) &= 2(2-2x)-3 \\ 5x-35 &= 4-4x-3 \\ 5x-35 &= 1-4x \\ 9x-35 &= 1 \\ 9x &= 36 \\ x &= 4 \end{aligned}$$

$$\begin{aligned} \textcircled{9} \quad 22+3(a+b) &= -4(3a+5) \\ 22+3a+18 &= -12a-20 \\ 40+3a &= -12a-20 \\ 40+15a &= -20 \\ 15a &= -60 \\ a &= -4 \end{aligned}$$

$$\begin{aligned} \textcircled{11} \quad -8(2y-4) &= 9(4-2y) \\ -16y+32 &= 36-18y \\ 2y+32 &= 36 \\ 2y &= 4 \\ y &= 2 \end{aligned}$$

$$\begin{aligned} \textcircled{13} \quad 8z+2(3+2z) &= 3(6+2z) \\ 8z+6+4z &= 18+6z \\ 12z+6 &= 18+6z \\ 6z+6 &= 18 \\ 6z &= 12 \\ z &= 2 \end{aligned}$$

$$\begin{aligned} \textcircled{15} \quad 4a+b-2a &= 3(a-3) \\ 4a+b-2a &= 3a-9 \\ 2a+b &= 3a-9 \\ -a+b &= -9 \\ -a &= -15 \\ a &= 15 \end{aligned}$$

$$\begin{aligned} \textcircled{17} \quad 1.5(-2x-4) &= (3.5+4x)2-2 \\ -3x-6 &= 7+8x-2 \\ -3x-6 &= 5+8x \\ -11x-6 &= 5 \\ -11x &= 11 \\ x &= -1 \end{aligned}$$

$$\textcircled{19} \quad 9(y+1) + 6 = 2(y+3)$$

$$9y + 9 + 6 = 2y + 6$$

$$9y + 15 = 2y + 6$$

$$7y + 15 = 6$$

$$7y = -9$$

$$y = \frac{-9}{7}$$

$$\textcircled{21} \quad -2g + 4(y+g) = 2g - 4(6-3g)$$

$$-2g + 16 + 4g = 2g - 24 + 12g$$

$$2g + 16 = 14g - 24$$

$$-12g + 16 = -24$$

$$-12g = -40$$

$$g = \frac{40}{12}$$

$$g = \frac{10}{3}$$

$$\textcircled{23} \quad 4z + 3(z+1) = -22 + 4(3z-5)$$

$$4z + 3z + 3 = -22 + 12z - 20$$

$$7z + 3 = -42 + 12z$$

$$-5z + 3 = -42$$

$$-5z = -45$$

$$z = 9$$