

#9

$$\begin{aligned} 2x + y &= 4 \\ -x + y &= 1 \rightarrow y = x + 1 \end{aligned}$$

PULL BACK INTO

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

PULL BACK INTO

$$\begin{aligned} y &= x + 1 \\ y &= 1 + 1 \\ y &= 2 \end{aligned}$$

$(1, 2)$

#10

$$\begin{aligned} x - y &= 0 \rightarrow x = y \\ x + y &= 2 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} y + y &= 2 \\ 2y &= 2 \\ y &= 1 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} x &= y \\ x &= 1 \end{aligned}$$

$(1, 1)$

#11

$$\begin{aligned} x + y &= 1 \rightarrow x = 1 - y \\ 2x - y &= 2 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} 2(1 - y) - y &= 2 \\ 2 - 2y - y &= 2 \\ -3y + 2 &= 2 \\ -3y &= 0 \\ y &= 0 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} x &= 1 - y \\ x &= 1 - 0 \\ x &= 1 \end{aligned}$$

$(1, 0)$

#19

$$\begin{aligned} 2c - d &= -2 \\ 4c + d &= 20 \rightarrow d = 20 - 4c \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} 2c - (20 - 4c) &= -2 \\ 2c - 20 + 4c &= -2 \\ 6c - 20 &= -2 \\ 6c &= 18 \\ c &= 3 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} d &= 20 - 4c \\ d &= 20 - 4(3) \\ d &= 20 - 12 \\ d &= 8 \end{aligned}$$

$(3, 8)$

#20

$$\begin{aligned} 2a &= 8 \rightarrow a = 4 \\ a + b &= 2 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} 4 + b &= 2 \\ b &= -2 \end{aligned}$$

$(4, -2)$

#21

$$\begin{aligned} 2x + 3y &= 31 \\ y &= x + 7 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} 2x + 3(x + 7) &= 31 \\ 2x + 3x + 21 &= 31 \\ 5x + 21 &= 31 \\ 5x &= 10 \\ x &= 2 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} y &= x + 7 \\ y &= 2 + 7 \\ y &= 9 \end{aligned}$$

$(2, 9)$

#22

$$\begin{aligned} p + q &= 4 \rightarrow p = 4 - q \\ 4p + q &= 1 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} 4(4 - q) + q &= 1 \\ 16 - 4q + q &= 1 \\ 16 - 3q &= 1 \\ -3q &= -15 \\ q &= 5 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} p &= 4 - q \\ p &= 4 - 5 \\ p &= -1 \end{aligned}$$

$(-1, 5)$

#23

$$\begin{aligned} X - 2Y &= -25 \\ 3X - Y &= 0 \rightarrow Y = 3X \end{aligned}$$

$$\begin{aligned} X - 2(3X) &= -25 \\ X - 6X &= -25 \\ -5X &= -25 \\ \boxed{X = 5} \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} Y &= 3X \\ Y &= 3(5) \\ \boxed{Y = 15} \end{aligned}$$

#24

$$\begin{aligned} U - V &= 0 \rightarrow U = V \\ 7U + V &= 0 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} 7V + V &= 0 \\ 8V &= 0 \\ \boxed{V = 0} \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} U &= V \\ \boxed{U = 0} \end{aligned}$$

(0, 0)

#25

$$\begin{aligned} X - Y &= 0 \rightarrow X = Y \\ 12X - 5Y &= -21 \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} 12Y - 5Y &= -21 \\ 7Y &= -21 \\ \boxed{Y = -3} \end{aligned}$$

PULL BACK INTO

$$\begin{aligned} X &= Y \\ \boxed{X = -3} \end{aligned}$$

(-3, -3)