

Answer Key

$$\begin{aligned} \boxed{D} \quad 4x + 9 + 7x - 15 &= 180 \\ 11x + 4 &= 180 \\ 11x &= 176 \\ x &= 16 \end{aligned}$$

$$\begin{aligned} \boxed{G} \quad 3y + 2 + 11y - 32 &= 180 \\ 14y - 30 &= 180 \\ 14y &= 210 \\ y &= 15 \end{aligned}$$

$$\begin{aligned} 3(15) + 2 &= 10x + 7 \\ 47 &= 10x + 7 \\ 40 &= 10x \\ x &= 4 \end{aligned}$$

$$\begin{aligned} \boxed{J} \quad 5y - 9 + 90 &= 8y + 42 \\ 5y + 81 &= 8y + 42 \\ 39 &= 3y \\ y &= 13 \end{aligned}$$

$$\begin{aligned} -8(13) + 42 + 14 - 4x &= 180 \\ 160 - 4x &= 180 \\ -4x &= 20 \\ x &= -5 \end{aligned}$$

$$\begin{aligned} \boxed{H} \quad 9y + 4 &= 11y - 14 \\ 18 &= 2y \\ y &= 9 \end{aligned}$$

$$\begin{aligned} 3x + 28 + 63 &= 11(9) - 14 \\ 3x + 91 &= 85 \\ 3x &= -6 \\ x &= -2 \end{aligned}$$

$$\begin{aligned} \boxed{B} \quad 9x - 37 &= 5x + 4 \\ 4x &= 48 \\ x &= 12 \end{aligned}$$

$$\begin{aligned} \boxed{A} \quad 129 &= 16x + 17 \\ 112 &= 16x \\ x &= 7 \end{aligned}$$

$$\begin{aligned} \boxed{F} \quad 6y + 14 &= 11y - 26 \\ 40 &= 5y \\ y &= 8 \end{aligned}$$

$$\begin{aligned} 6(8) + 14 + 13x - 25 &= 180 \\ 13x + 37 &= 180 \\ 13x &= 143 \\ x &= 11 \end{aligned}$$

$$\begin{aligned} \boxed{C} \quad 27 - 2x + 139 &= 180 \\ -2x + 166 &= 180 \\ -2x &= 14 \\ x &= -7 \end{aligned}$$

$$\begin{aligned} \boxed{I} \quad 14x - 23 &= 8x + 21 + 16 \\ 14x - 23 &= 8x + 37 \\ 6x &= 60 \\ x &= 10 \end{aligned}$$

$$\begin{aligned} \boxed{E} \quad 12x + 22 &= 19x + 1 \\ 21 &= 7x \\ 3 &= x \end{aligned}$$