

Chain Game Algebra 1,2

$$\begin{array}{r} \text{A) } 3 + A = 10 \\ -3 \quad -3 \\ \hline A = 7 \end{array}$$

$$A = \boxed{7}$$

$$\begin{array}{r} \text{B) } 8 + A = B \\ 8 + 7 = B \\ \hline 15 = B \end{array}$$

$$B = \boxed{15}$$

$$\begin{array}{r} \text{C) } B - C = 4 \\ 15 - C = 4 \\ -4 \quad + C \quad -4 \quad + C \\ \hline 11 = C \end{array}$$

$$C = \boxed{11}$$

$$\begin{array}{r} \text{D) } CD = 33 \\ 11 \overline{) D} = 33 \\ \hline 11 \quad 11 \\ \hline D = 3 \end{array}$$

$$D = \boxed{3}$$

$$\begin{array}{r} \text{E) } 4D = E \\ 4(3) = E \\ \hline 12 = E \end{array}$$

$$E = \boxed{12}$$

$$\begin{array}{r} \text{F) } 11 + F = E \\ N + F = 12 \\ -11 \quad -11 \\ \hline F = 1 \end{array}$$

$$F = \boxed{1}$$

$$\begin{aligned}
 \text{G)} \quad 18F &= G \\
 18(1) &= G \\
 18 &= G \\
 G &= \boxed{18}
 \end{aligned}$$

$$\begin{aligned}
 \text{H)} \quad GH &= 36 \\
 \frac{18}{18} H &= \frac{36}{18} \\
 H &= \boxed{2} \quad H = 2
 \end{aligned}$$

$$\begin{aligned}
 \text{I)} \quad HI &= 6 \\
 \frac{2I}{2} &= \frac{6}{2} \\
 I &= \boxed{3} \quad I = 3
 \end{aligned}$$

$$\begin{aligned}
 \text{J)} \quad J + I &= 14 \\
 J + \cancel{3} &= 14 \\
 \quad \quad - 3 \\
 J &= \boxed{11} \quad J = 11
 \end{aligned}$$

$$\begin{aligned}
 \text{K)} \quad 5J &= K \\
 5(11) &= K \\
 55 &= K \\
 K &= \boxed{55}
 \end{aligned}$$

$$\begin{aligned}
 \text{L)} \quad K - 50 &= L \\
 55 - 50 &= L \\
 L &= \boxed{5} \quad 5 = L
 \end{aligned}$$

$$\begin{array}{rcl} m) & & \\ & 2m & = 25 \\ & \underline{5m} & = 25 \\ & \underline{\quad} & \underline{\quad} \\ & 3m & = 0 \end{array}$$

$$m = \boxed{5}$$

$$m = 5$$

$$\begin{array}{rcl} N) & N + M & = 32 \\ & N + \underline{5} & = 32 \\ & \underline{-5} & \underline{-5} \end{array}$$

$$N = \boxed{27}$$

$$N = 27$$

$$\begin{array}{rcl} O) & & \\ & 90 & = N \\ & \underline{90} & = 27 \\ & \underline{\quad} & \underline{\quad} \\ & 0 & = 0 \end{array}$$

$$O = \boxed{3}$$

$$O = 3$$

$$\begin{array}{rcl} P) & & \\ & 3P & = 0 \\ & \underline{3P} & = 3 \\ & \underline{\quad} & \underline{\quad} \end{array}$$

$$P = \boxed{1}$$

$$P = 1$$

$$\begin{array}{rcl} Q) & P + 84 & = Q \\ & 1 + 84 & = 85 \end{array}$$

$$Q = \boxed{85}$$

$$\begin{array}{rcl} R) & Q - 45 & = R \\ & 85 - 45 & = R \\ & 40 & = R \end{array}$$

$$R = \boxed{40}$$

S) $RS = 120$
 $\frac{40S}{40} = \frac{120}{40}$
 $S = \boxed{3}$ $S = 3$

T) $T - 38 = S$
 $T - 38 = 3$
 $+ 38 \quad + 38$
 $T = \boxed{41}$ $T = 41$

U) $T - 16 = U$
 $41 - 16 = U$
 $25 = U$
 $U = \boxed{25}$

V) $\sqrt{U} = V$
 $\sqrt{25} = V$
 $5 = V$
 $V = \boxed{5}$

W) $VW = 35$
 $\frac{5W}{5} = \frac{35}{5}$
 $W = \boxed{7}$ $W = 7$

X) $W^2 = X$
 $7^2 = X$
 $7 \cdot 7 = X$
 $X = \boxed{49}$ $49 = X$

y) $X - Y = 37$
 $49 - Y = 37$
 $-37 + X \quad -37 + Y$

$Y = \boxed{12}$

z) $Y^2 = Z$
 $12^2 = Z$
 $12 \cdot 12 = Z$
 $Z = \boxed{144}$ $144 = Z$