

HW: Consecutive Integers NOV. 13

(A) Let 1st CI = $x = -15$ ^{ans}
 2nd CI = $x+1 = -14$

Eq: $x + x + 1 = -29$
 $2x + 1 = -29$
 $\begin{array}{r} -x \quad -1 \\ \hline 2x = -30 \\ \quad \\ x = -15 \end{array}$
 $x+1$
 $-15+1 = -14$

(D) Let ^{ans}
 1st CI = $x = -50$
 2nd CI = $x+1 = -49$
 3rd CI = $x+2 = -48$

$x + x + 1 + x + 2 = -147$
 $3x + 3 = -147$
 $\begin{array}{r} -3 \quad -3 \\ \hline 3x = -150 \\ \quad \\ x = -50 \end{array}$

(B) Let 1st CI = $x = 15$ ^{ans}
 2nd CI = $x+1 = 14$
 3rd CI = $x+2 = 17$

$x+1$ } $x+2$
 $-50+1$ } $-50+2$
 -49 } -48

Eq: $x + x + 1 + x + 2 = 48$
 $3x + 3 = 48$
 $\begin{array}{r} -3 \quad -3 \\ \hline 3x = 45 \\ \quad \\ x = 15 \end{array}$

$x+1$ } $x+2$
 $15+1$ } $15+2$
 16 } 17

(E) Let ^{ans}
 1st CEI = $x = 32$
 2nd CEI = $x+2 = 34$

$x + x + 2 = 66$
 $2x + 2 = 66$
 $\begin{array}{r} -2 \quad -2 \\ \hline 2x = 64 \\ \quad \\ x = 32 \end{array}$

$x+2$
 $32+2$
 34

K.) Let ans
 1st COI = $x = -45$
 2nd COI = $x + 2 = -43$

$$x + x + 2 = -88$$

$$2x + 2 = -88$$

$$\begin{array}{r} -2 \quad -2 \\ \hline 2x = -90 \\ \hline x = -45 \end{array}$$

$$\begin{array}{r} x + 2 \\ -45 + 2 \\ \hline -43 \end{array}$$

H.) Let ans
 1st COI = $x = 11$
 2nd COI = $x + 2 = 13$
 3rd COI = $x + 4 = 15$
 4th COI = $x + 6 = 17$

$$x + x + 2 + x + 4 + x + 6 = 50$$

$$4x + 12 = 50$$

$$\begin{array}{r} -12 \quad -12 \\ \hline 4x = 38 \\ \hline x = 9.5 \end{array}$$

$$x = 11$$

$$\begin{array}{l} x+2 \quad \} \quad x+4 \quad \} \quad x+6 \\ 11+2 \quad \} \quad 11+4 \quad \} \quad 11+6 \\ 13 \quad \} \quad 15 \quad \} \quad 17 \end{array}$$

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T.) Let ans

1st CEI = $x = 16$

2nd CEI = $x + 2 = 18$

3rd CEI = $x + 4 = 20$

$$\begin{array}{r}
 x + x + 4 = 36 \\
 2x + 4 = 36 \\
 \underline{-4 \quad -4} \\
 2x = 32 \\
 \underline{\quad \quad 2}
 \end{array}$$

$$x = 16$$

$$\begin{array}{l}
 x + 2 \quad \} \quad x + 4 \\
 16 + 2 \quad \} \quad 16 + 4 \\
 18 \quad \quad \} \quad 20
 \end{array}$$

R.) Let ans

1st CI = $x = 24$

2nd CI = $x + 1 = 25$

3rd CI = $x + 2 = 26$

$$\begin{array}{r}
 2x + 3(x + 2) = 126 \\
 2x + 3x + 6 = 126 \\
 5x + 6 = 126 \\
 \underline{-6 \quad -6} \\
 5x = 120 \\
 \underline{\quad \quad 5}
 \end{array}$$

$$x = 24$$

$$\begin{array}{l}
 x + 1 \quad \} \quad x + 2 \\
 24 + 1 \quad \} \quad 24 + 2 \\
 25 \quad \quad \} \quad 26
 \end{array}$$