

CRYPTIC QUIZ

1. Why does Beethoven now spend all his time erasing music?

HeISDecomposing
16 6 -4 10 -3 6 -9 7 20 -5 7 10 -4 3 21

2. What is it called when a sea bird lands on a channel marker?

BuoyMeetsGull
-36 9 7 -8 20 6 6 -2 10 21 9 11 11

3. How does a tree feel after a hard day at work?

Bushed
-36 9 10 16 6 -3

TO DECODE THE ANSWERS TO THESE QUESTIONS:

Solve each equation below and find your answer in the code. Each time the solution appears, write the letter of that exercise above it.

Ⓐ $8u = 3u + 35$

$u = 7$

Ⓝ $7y = 33 - 4y$

$y = 3$

Ⓔ $2x + 48 = 10x$

$x = 6$

Ⓣ $5t - 26 = 18t$

$t = -2$

Ⓢ $k = 8k + 28$

$k = -4$

Ⓖ $-30n = -27n - 63$

$n = 21$

ⓗ $4x + 4 = 2x + 36$

$x = 16$

Ⓓ $9y - 1 = y - 25$

$y = -3$

Ⓟ $14p - 8 = 22 + 20p$

$p = -5$

Ⓛ $z + 81 = 9z - 7$

$z = 11$

Ⓨ $39 - 12w = 7 - 16w$

$w = -8$

Ⓒ $-15v - 40 = 23 - 8v$

$v = -9$

Ⓜ $63 - x = 2x + 3$

$x = 20$

Ⓤ $3n + 46 = 1 + 8n$

$n = 9$

Ⓑ $12r - 18 = 13r + 18$

$r = -36$

Ⓢ $-x - 1 = x - 21$

$x = 10$

$$\begin{array}{r} \textcircled{O} \quad 8u = 3u + 35 \\ -3u \quad -3u \\ \hline \end{array}$$

$$\begin{array}{r} 5u = 35 \\ \hline 5 \quad 5 \end{array}$$

$$u = 7$$

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$$\begin{array}{r} \textcircled{N} \quad 7y = 33 - 4y \\ +4y \quad +4y \\ \hline \end{array}$$

$$\begin{array}{r} 11y = 33 \\ \hline 11 \quad 11 \end{array}$$

$$y = 3$$

$$\begin{array}{r} \textcircled{E} \quad 2x + 4x = 10x \\ -2x \quad -2x \\ \hline \end{array}$$

$$\begin{array}{r} 4x = 8x \\ \hline 8 \quad 8 \end{array}$$

$$6 = x$$

$$\textcircled{T} \quad 5t - 26 = 18t$$

$$\begin{array}{r} -5t \qquad -5t \\ \hline \end{array}$$

$$\begin{array}{r} -26 = 13t \\ \hline 13 \quad 13 \end{array}$$

$$\boxed{-2 = t}$$

$$\textcircled{I} \quad K = 8K + 28$$

$$\begin{array}{r} -8K - 8K \\ \hline \end{array}$$

$$\begin{array}{r} -7K = 28 \\ \hline -7K \quad -7 \end{array}$$

$$\boxed{K = -4}$$

$$\textcircled{G} \quad \begin{array}{r} -30n = -27n - 63 \\ +27n \quad +27n \\ \hline \end{array}$$

$$\begin{array}{r} -3n = -63 \\ \hline -3 \quad -3 \end{array}$$

$$\underline{n = 21}$$

$$\textcircled{H} \quad \begin{array}{rcl} 4x + 4 & = & 2x + 36 \\ -2x - 4 & -2x - 4 & \end{array}$$

$$2x = 32$$

$$\begin{array}{r} \overline{2} \quad \quad \quad \overline{2} \\ \hline x = 16 \end{array}$$

$$\textcircled{J} \quad \begin{array}{rcl} 7y - 1 & = & y - 25 \\ -y + 1 & -y + 1 & \end{array}$$

$$\begin{array}{r} \overline{8y} = -24 \\ \overline{8} \quad \quad \overline{8} \\ \hline y = -3 \end{array}$$

$$\textcircled{P} \quad 14p - 8 = 22 + 20p$$

$$\begin{array}{r} -14p \quad -22 \quad -22 \quad -14p \\ \hline \end{array}$$

$$-30 = \cancel{6p}$$

$$\frac{-30}{6} = \frac{\cancel{6p}}{\cancel{6}}$$

$$-5 = p$$

$$\textcircled{L} \quad z + 81 = 9z - 7$$

$$\begin{array}{r} -z \quad +7 \quad -z \quad +7 \\ \hline \end{array}$$

$$88 = \cancel{8z}$$

$$\frac{88}{8} = \frac{\cancel{8z}}{\cancel{8}}$$

$$11 = z$$

$$\textcircled{W} \quad 39 - 12w = 7 - 16w$$

$$\begin{array}{r} +39 \quad +16w \quad -39 \quad +16w \\ \hline \end{array}$$

$$4w = -32$$

$$\frac{4w}{4} = \frac{-32}{4}$$

$$w = -8$$

$$\begin{array}{rclcl} \textcircled{c} & -15v - 40 & = 23 & - 8v & \\ & -15v & -23 & -23 & +15v \end{array}$$

$$\frac{-63}{7} =$$

$$\frac{7v}{7}$$

$$-9 = v$$

$$\begin{array}{rclcl} \textcircled{M} & 63 - x & = 2x + 3 & & \\ & -3 + x & +x & -3 & \end{array}$$

$$\frac{60}{3}$$

$$= \frac{3x}{3}$$

$$20 = x$$

$$\begin{array}{rclcl} \textcircled{U} & 3n + 46 & = 1 + 8n & & \\ & -3n - 1 & -1 - 3n & & \end{array}$$

$$45 = 8n$$

$$\frac{45}{5} = \frac{8n}{5}$$

$$9 = n$$

3

$$12r - 18 = 13r + 18$$

$$-12r - 18 \quad -12r - 18$$

$$-36 = r$$

5

$$-x - 1 = x - 21$$

$$+x + 21 \quad +x + 21$$

$$\frac{20}{2} = \frac{x}{x}$$

$$10 = x$$