

Key

Did You Hear About...

OBJECTIVE 4-C: To solve quadratic equations by factoring (equations not in standard form).

A The	B Newspaper	C Editor	D who	E visited	F some	G cannibals
H and	I ended	J up	K as	L editor	M in	N chief ?

$\{-8, 4\}$ SOME

$\{0, 15\}$ LUNCH

$\{\frac{8}{5}, 3\}$ CHIEF

$\{7, 3\}$ THE

$\{-\frac{3}{5}, 3\}$ ENDED

$\{0, 11\}$ WHO

$\{-\frac{1}{2}, \frac{2}{3}\}$ COOKED

$\{-5, 1\}$ NEWSPAPER

$\{-\frac{5}{2}, -\frac{3}{4}\}$ AS

Solve each equation below. Find the solution set in one of the answer columns and notice the word next to it. Write this word in the box above that contains the letter of that exercise. Keep working and you will hear about some cannibals who finally got "fed up."

(A) $n^2 - 10n = -21$

(H) $2x^2 + 10 = 9x$

(B) $x^2 + 4x = 5$

(I) $12t + 9 = 5t^2$

(C) $u^2 - 8 = 7u$

(J) $9y^2 = 16$

(D) $m^2 = 11m$

(K) $15 + 26d = -8d^2$

(E) $9a = -a^2 - 18$

(L) $18n = 2n^2$

(F) $h^2 = 32 - 4h$

(M) $10v^2 = 13v + 3$

(G) $3y^2 + 14y = 5$

(N) $23p = 5p^2 + 24$

$\{-\frac{1}{5}, \frac{3}{2}\}$ IN

$\{\frac{1}{3}, -5\}$ CANNIBALS

$\{\frac{1}{5}, -\frac{5}{2}\}$ STEW

$\{8, -1\}$ EDITOR

$\{\frac{4}{5}, -6\}$ FOOD

$\{0, 9\}$ EDITOR

$\{\frac{5}{2}, 2\}$ AND

$\{-6, -3\}$ VISITED

$\{\frac{4}{3}, -\frac{4}{3}\}$ UP

Did you hear about... Puzzle

$$\begin{aligned} \text{A. } n^2 - 10n &= -21 \\ n^2 - 10n + 21 &= 0 \\ (n-3)(n-7) &= 0 \\ \boxed{n=3, 7} \end{aligned}$$

$$\begin{aligned} \text{H. } 2x^2 + 10 &= 9x \\ 2x^2 - 9x + 10 &= 0 \\ (2x-5)(x-2) &= 0 \\ \boxed{x = \frac{5}{2}, 2} \end{aligned}$$

$$\begin{aligned} \text{B. } x^2 + 4x &= 5 \\ x^2 + 4x - 5 &= 0 \\ (x+5)(x-1) &= 0 \\ \boxed{x = -5, 1} \end{aligned}$$

$$\begin{aligned} \text{I. } 12t + 9 &= 5t^2 \\ 5t^2 - 12t - 9 &= 0 \\ (5t+3)(t-3) &= 0 \\ \boxed{t = -\frac{3}{5}, 3} \end{aligned}$$

$$\begin{aligned} \text{C. } u^2 - 8 &= 7u \\ u^2 - 7u - 8 &= 0 \\ (u-8)(u+1) &= 0 \\ \boxed{u = 8, -1} \end{aligned}$$

$$\begin{aligned} \text{J. } \frac{9y^2}{9} &= \frac{16}{9} \\ \sqrt{y^2} &= \sqrt{\frac{16}{9}} \\ \boxed{y = \pm \frac{4}{3}} \end{aligned}$$

$$\begin{aligned} \text{D. } m^2 &= 11m \\ m^2 - 11m &= 0 \\ m(m-11) &= 0 \\ \boxed{m = 0, 11} \end{aligned}$$

$$\begin{aligned} \text{K. } 15 + 26d &= -8d^2 \\ 8d^2 + 26d + 15 &= 0 \\ (4d+3)(2d+5) &= 0 \\ \boxed{d = -\frac{3}{4}, -\frac{5}{2}} \end{aligned}$$

$$\begin{aligned} \text{E. } 9a &= -a^2 - 18 \\ a^2 + 9a + 18 &= 0 \\ (a+6)(a+3) &= 0 \\ \boxed{a = -6, -3} \end{aligned}$$

$$\begin{aligned} \text{L. } 18n &= 2n^2 \\ 0 &= 2n^2 - 18n \\ 0 &= 2n(n-9) \\ \boxed{n = 0, 9} \end{aligned}$$

$$\begin{aligned} \text{F. } h^2 &= 32 - 4h \\ h^2 + 4h - 32 &= 0 \\ (h+8)(h-4) &= 0 \\ \boxed{h = -8, 4} \end{aligned}$$

$$\begin{aligned} \text{M. } 10v^2 &= 13v + 3 \\ 10v^2 - 13v - 3 &= 0 \\ (2v-3)(5v+1) &= 0 \\ \boxed{v = \frac{3}{2}, -\frac{1}{5}} \end{aligned}$$

$$\begin{aligned} \text{G. } 3y^2 + 14y &= 5 \\ 3y^2 + 14y - 5 &= 0 \\ (3y-1)(y+5) &= 0 \\ \boxed{y = \frac{1}{3}, -5} \end{aligned}$$

$$\begin{aligned} \text{N. } 23p &= 5p^2 + 24 \\ 0 &= 5p^2 - 23p + 24 \\ (5p-8)(p-3) &= 0 \\ \boxed{p = \frac{8}{5}, 3} \end{aligned}$$