

Did you Hear about (pg. 103)

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

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

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

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

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

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

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

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

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

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

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

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

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

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