

$$\frac{d\phi}{d\psi} = \frac{1}{2} \rightarrow \frac{d\psi}{2} \quad w=1$$

$$A_1 = lw = \frac{\omega}{\Sigma} w \cdot w = \frac{\omega}{\Sigma} w^2$$

(1

$$\omega \phi \rightarrow \phi = \frac{\ell'}{\omega}$$

مسئله ۱۵: $A r = w l' = w \phi r$

9

$$\frac{A_r}{A_i} = \frac{w \phi^r}{\frac{\omega}{\Sigma} w^r} = \frac{\phi}{\omega} \rightarrow \frac{A_r}{A_i} = \frac{\omega}{\Sigma} \times \frac{1 + \sqrt{\omega}}{r} = \frac{r(\sqrt{\omega} + 1)}{\omega} \rightarrow \frac{1}{\omega}$$

$\frac{\alpha^r}{y^r} = \rho$



$$\frac{z}{r} = \frac{1 + \sqrt{a}}{r}$$

$$\frac{\sqrt{x^r + y^r}}{n} = \frac{1 + \sqrt{a}}{r} \Rightarrow (r)$$

$$x^r + y^r = z^r \rightarrow z = \sqrt{x^r + y^r}$$

$$\frac{x^r + y^r}{x^r} = \frac{y + r\sqrt{a}}{2}$$

$$1 + \frac{y^r}{x^r} = \frac{K(r + \sqrt{\omega})}{rK} \Rightarrow \frac{y^r}{x^r} = \frac{r + \sqrt{\omega}}{r} - \frac{r}{r} = \frac{1 + \sqrt{\omega}}{r} \Rightarrow \frac{x^r}{y^r} = \frac{r}{1 + \sqrt{\omega}}$$

$$r_a + \sqrt{r_a^2 + \Sigma a} = r \rightarrow \sqrt{r_a^2 + \Sigma a} = r - r_a$$

$$\frac{a+1}{a} = f$$

$$\Delta = b^2 - 4ac \quad \rightarrow \quad \sqrt{a} - 19a + 1 = 0 \Rightarrow (5) -$$

$$\frac{\frac{r}{v} + 1}{\frac{r}{v}} = \frac{\frac{q}{v}}{\frac{r}{v}} = \frac{q}{r} \cdot \frac{1}{\frac{r}{v}} \rightarrow \frac{q}{r} \cdot \frac{v}{r} = \frac{qv}{r^2} = 1 \Rightarrow \frac{14 + 12}{14} = \frac{v}{v} \Rightarrow \frac{26}{14} = \frac{v}{v} \Rightarrow v = 13$$

$$\frac{\sqrt{x+1}}{\sqrt{x-1}+r} - \frac{\sqrt{x+1}}{r-\sqrt{x-1}} = \frac{x-1}{\sqrt{x-1}} \Rightarrow \frac{\sqrt{x+1} (r-\sqrt{x-1}-\sqrt{x-1}-r)}{r^2-(x-1)} = \sqrt{x-1} \quad (r=1, \sqrt{0})$$

$$\Rightarrow \sqrt{x+1} = x-1 \rightarrow x^2 + 1 = x^2 - 2x + 1 \Rightarrow x^2 - 2x + 1 = 0$$

درای ۲ روزه تمام نیست است ۱۰۰۰ پس ۴۰۰۰ ۱۲ غیر قابل قبول می باشد و تنها ارضیه مثبت دارد

$$\frac{1}{\sqrt{r-n}+r} - \frac{1}{r-\sqrt{r-n}} = \frac{r-n}{\Delta\sqrt{r-n}} \cdot \frac{-r\sqrt{r-n}}{\cancel{r-n}} = \frac{r-n}{\Delta\sqrt{r-n}} \quad (5)$$

$$\frac{r - \sqrt{r-n} - (r + \sqrt{r-n})}{(r + \sqrt{r-n})(r - \sqrt{r-n})} = \frac{r-n}{2\sqrt{r-n}}$$

$$f - n^r = -1 \cdot (r - n) \Rightarrow$$

$$u^r + 1 \cdot u - r \xi = 0$$

$$\hookrightarrow (x+1)(x-1) = 0$$

$x = -12, 2$

$$\frac{1}{x^r} + \frac{1}{(1-x)^r} = \frac{14}{9} \Rightarrow \frac{(1-x)^r + x^r}{x^r(1-x)^r} = \frac{14}{9} \Rightarrow 14x^r - 3r \cdot x^r + 12r x^r$$

$$ax^r + bx^r + cx^r + dx + e = 0 \quad S = -\frac{b}{a} = \frac{-3r}{-14} = r \quad (5) + 11x - 9 = 0$$

$$a = 14, b = -3r.$$

$$\sqrt{x + \sqrt{-x^r + 2x^r + r^2x - 1}} + \sqrt{x^r + \sqrt{-x^r + 4x - 1}} = \frac{x+r}{I}$$

I) $x+r > 0 \rightarrow x > -r$ II) $-x^r + 4x - 1 \geq 0 \Rightarrow (x-r)(x-r) \leq 0 \rightarrow r \leq x \leq r$

III) $-x^r(x-r) + r^2(x-r) \geq 0 \rightarrow (x-r)(r^2 - x^r) \geq 0 \rightarrow (x-r)(r^2 - x)(r^2 + x) \geq 0$

$\hookrightarrow x \leq -r, r \leq x \leq r$ $\textcircled{I} \cap \textcircled{II} \cap \textcircled{III} \rightarrow x = r$

$$y = |x+r| + |x-r|, \quad y+x=14 \rightarrow y = \frac{-x+14}{r}$$

$\hookrightarrow y = rx+1, y = -rx-1$ $rx+1 = \frac{-x+14}{r} \Rightarrow 4x+r = 14-x \Rightarrow x=r$

$-rx-1 = \frac{-x+14}{r} \Rightarrow -4x-3 = -x+14 \Rightarrow x = -5, y = v$

$AB_{\text{معدوم}} = \sqrt{(r-(-r))^r + (v-v)^r} = \sqrt{4r^r} = 2\sqrt{r}$

$A(r, v)$ $B(-r, v)$

$$y = \frac{1}{r}x + r$$

$$y = \sqrt{x^r - 4x + r}$$

$$\hookrightarrow y = \sqrt{(x-r)^r} = |x-r|$$

$$r = 12$$

$$|x-r| = \frac{1}{r}x + r$$

$$\textcircled{II} \quad r < x \rightarrow -(x-r) = \frac{1}{r}x + r \Rightarrow x = 0$$

$$\textcircled{I} \Rightarrow x \leq r \rightarrow x-r = \frac{1}{r}x + r \rightarrow x = 14$$

$$y = \frac{1}{r}(14) + r = 4$$

$$(14, 4)$$

$$(0, 2)$$

$$y = \frac{1}{r}(0) + r = 2$$

$$r \cdot \left(\frac{1}{x} + \frac{1}{y}\right) = 1 \rightarrow \frac{1}{x} + \frac{1}{y} = \frac{1}{r} \Rightarrow$$

$$\frac{1}{x} + \frac{1}{x+4} = \frac{1}{r} \Rightarrow x^2 - 31x - 18 = 0$$

$$\frac{1}{x} + \frac{1}{x+4} = \frac{1}{r} \Rightarrow x^2 - 31x - 18 = 0$$

$$x = \frac{31 \pm \sqrt{(31)^2 + 4(18)}}{2} = \frac{31 \pm 34}{2}$$

$$x = -5$$

غالباً کہ متکثر (مربع) قابل قبول ہے۔