

۲۵

-۱

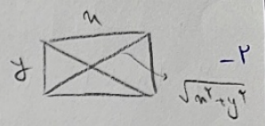
$$\frac{a}{y} = \frac{1}{r} \quad \frac{a}{y} = \frac{1+\sqrt{a}}{r} \quad \frac{a}{y} = \frac{1+\sqrt{a}}{r} y$$

$$y = \frac{a}{1+\sqrt{a}}$$

$$\frac{S_1}{S_2} = \frac{\frac{1+\sqrt{a}}{y} \times y}{\frac{a}{y} \times y} = \frac{1+\sqrt{a}}{a}$$

۵

$$(1+\sqrt{a})m^2 = ky^2 \quad \frac{1+\sqrt{a}}{r} = \frac{r+\sqrt{a}}{r} = \frac{m^2+y^2}{m^2} \quad \frac{1+\sqrt{a}}{r} = \frac{\sqrt{m^2+y^2}}{m}$$



$$\Rightarrow \frac{m^2}{y^2} = \frac{y(1-\sqrt{a})}{1+\sqrt{a}(1-\sqrt{a})} = \frac{\sqrt{a}-1}{r}$$

۵

$$ra + \sqrt{ra^2 + \varepsilon a} = r \quad \frac{a+1}{a} = ? \rightarrow a = \frac{r}{v} \rightarrow \frac{a}{v} = \frac{r}{v} = \frac{r}{v}$$

-۳

$$\sqrt{ra^2 + \varepsilon a} = r - ra \quad ra^2 + \varepsilon a = \varepsilon + 4a^2 - 14a \rightarrow va^2 - 14a + \varepsilon = 0 \rightarrow a^2 - 14a + \varepsilon = 0 \quad (a-14)(a-\varepsilon) = 0$$

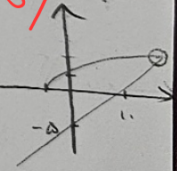
۵

$$a = r \rightarrow 9 + \sqrt{14} = 1 \quad a = \frac{r}{v} \Rightarrow \frac{9}{v} + \sqrt{\frac{r \times \varepsilon}{\varepsilon a} + \frac{14}{v \times v}} = \frac{1}{v} + \frac{9}{v} = r$$

$$\frac{\sqrt{n+1}}{\sqrt{n-1} + r} = \frac{\sqrt{n+1}}{r - \sqrt{n-1}} = \frac{n-1}{\sqrt{n-1}} \rightarrow \frac{r\sqrt{n+1} - \sqrt{(n+1)(n-1)}}{(r+\sqrt{n-1})(r-\sqrt{n-1})} = \frac{-r\sqrt{n-1}}{r^2 - n + 1}$$

$$\rightarrow \frac{-r\sqrt{n-1} \times \sqrt{n+1}}{1-n} = \frac{1}{\sqrt{n-1}} \rightarrow \frac{-r\sqrt{n+1}}{1-n} = 1 \rightarrow \sqrt{n+1} = \frac{n}{r} - a$$

۵



$$\frac{1}{\sqrt{r-m} + r} - \frac{1}{r - \sqrt{r-m}} = \frac{r-m}{a\sqrt{r-m}}$$

$$\frac{r - \sqrt{r-m} - r - \sqrt{r-m}}{r+m} = \frac{-2\sqrt{r-m}}{r+m} = \frac{\sqrt{r-m}}{a} - a$$

$$-1 = r+m \quad -r = a$$

۵

