

17, 18

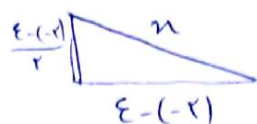
17

18

A | -r B | ε

$\frac{1}{r} = \frac{1}{\epsilon} \cdot \frac{\epsilon}{r}$

المساحة المربعة



طالع مربع $\rightarrow n = \sqrt{r^2 + \epsilon^2} = r\sqrt{5}$

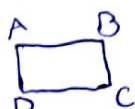
(2)

مساحة المربع = ? $n^2 = \epsilon^2$ ✓

A | -1 B | r
C | u D | -1-u

المساحة المربعة
في D, C

$n_1 + m_C = n_D + m_B \rightarrow -1 + n = -1 + r$



$\rightarrow m_{AB} = -\frac{1}{m_{AC}}$ قطر AC

$\frac{\epsilon-1}{-1-r} = -\frac{1}{m_{AC}} \rightarrow m_{AC} = \frac{\epsilon}{r}$

$\frac{\epsilon-y}{-1-u} = \frac{\epsilon}{r}$

$\frac{\epsilon-y}{-1-\frac{\epsilon}{r}} = \frac{\epsilon}{r} \rightarrow y = \frac{r\epsilon}{r+\epsilon}$

$AC = \sqrt{\frac{r\epsilon}{\epsilon} + \frac{100}{r}} = \frac{r\epsilon}{r}$

جواب صفى اخذ

(2)

مساحة = ? $r(AB, AC) = \frac{r\epsilon}{r+\epsilon}$

$rm + (m^2 - 1)y = r \rightarrow y = \frac{-rm}{m^2 - 1}u + \frac{r}{m^2 - 1}$

المساحة المربعة

$\frac{r}{m^2 - 1} = \tan(45^\circ) = \sqrt{r}$

$\frac{-rm}{m^2 - 1} = \sqrt{r} \rightarrow \sqrt{r}(m^2 + rm - \sqrt{r}) = 0$

$m = \frac{1}{\sqrt{r}} \text{ or } -\frac{r}{\sqrt{r}}$

المساحة المربعة = ? $\frac{1}{\sqrt{r}} - \left(-\frac{r}{\sqrt{r}}\right) = \frac{\epsilon}{\sqrt{r}} = \frac{\epsilon\sqrt{r}}{r}$ ✓

(2)

A | 1 B | r C | v

$BC: \frac{11-r}{v-r} = 2$

~~Handwritten scribbles and crossed-out text.~~

BC: ~~Handwritten~~ $y = rm - r$ $\rightarrow \frac{|9-r+r|}{\sqrt{r^2+1r^2}} = \frac{1}{\sqrt{2}}$ ✓

(2)

AH طول المربع = $r\sqrt{5}$

AB: $y + rm = v$

AC: $y - rm = 1v$

BC: $ry - vn = -19$

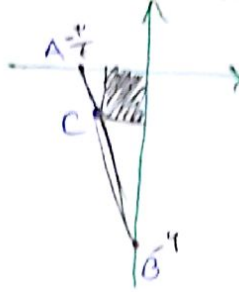
المساحة المربعة: $v - rm = \frac{vm - 19}{r}$

B $u = r \rightarrow y = 1$

BC AC $\rightarrow \frac{|1v+9-\epsilon|}{\sqrt{r^2+\epsilon^2}} = \frac{r\epsilon}{\epsilon}$

(2)

BH طول المربع = $\frac{r\epsilon}{\epsilon} = \epsilon$ ✓



$C \equiv AB$ و $y \cdot n$ برقرار
 $A | \frac{5}{2}$ $B | 4$
 $AB: y = -n - 4$

$-n - 4 = n$
 $n = -\frac{4}{2}$ $y = -\frac{4}{2}$

(۲)

$z = \text{طول وتر مربع} = \sqrt{(\frac{5}{2})^2 + (\frac{4}{2})^2} = \frac{\sqrt{41}}{2}$ ✓

درایه مستطیل $\begin{cases} y - an = 1 \\ ay - n = a - 1 \end{cases}$ $y = an + 1$
 $ay - n = a - 1$ $y = \frac{1}{a}n + \frac{a-1}{a}$

$a = 1 \rightarrow y = n + 1$
 $a = -1 \rightarrow y = n$

(۱, ۵)

راس $\begin{cases} y = n + 1 \\ y = n \end{cases}$ $n = 1$ $y = 2$

$a = 1 \rightarrow y = -n + 1$
 $a = -1 \rightarrow y = -n + 2$

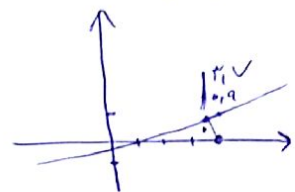
$z = \text{مساحت} = \frac{\sqrt{41}}{2} \times \frac{\sqrt{41}}{2} = \frac{41}{4}$

$n - 2y = 1$

$h = \frac{|1 - 1|}{\sqrt{1 + 4}} = \frac{\sqrt{41}}{5}$

(۲)

فاصله A تا خط = طول یک ضلع
 ارتفاع با قاعده برابر یا مثلث قائم الزامی

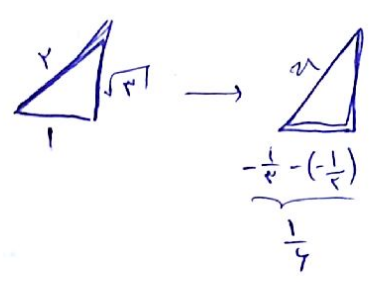


$S = \frac{1}{2} \times \frac{\sqrt{41}}{5} \times \frac{\sqrt{41}}{5} = \frac{41}{50}$

$S = \frac{1}{2} \times 0.9 \times 2 = \frac{0.9}{1}$ ✓

$\frac{41}{50} = 1.22$

$\frac{1}{a^2}$ و $\frac{1}{b^2}$



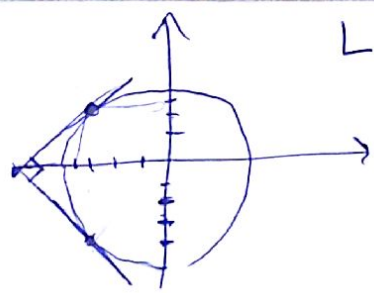
$n = 2 \times \frac{1}{4} = \frac{1}{2}$

(۲)

درایه و قطر مربع
 درایه و قطر مربع

$n \times \sqrt{2} = \frac{\sqrt{2}}{2}$ ✓

خط L
 معادله برای این خط
 شعاع = $\frac{1}{2}$
 نقطه برخورد L در ربع دوم
 براین دایره معادله باشد



$L: y = \frac{3}{5}x + b$ $b = -\frac{25}{5}$

$L: y = \frac{3}{5}x - \frac{25}{5}$

$L': y = \frac{3}{5}x + b'$

$b' = \frac{25}{5}$

$L': y = \frac{3}{5}x + \frac{25}{5}$

$\frac{3}{5}x - \frac{25}{5} = \frac{3}{5}x + \frac{25}{5} \rightarrow x = -1$ ✓

$-1 \times -1 = 1$ ✓

(۲)

$$m_{CD} = m_{AB} = -\frac{r}{k} \rightarrow \frac{r}{-1-rn} = -\frac{r}{k} \rightarrow n = \frac{r}{r}$$

$$m_{AB} \times m_{BC} = -1 \rightarrow -\frac{r}{k} \times \frac{y-1}{-\frac{r}{r}} = -1 \rightarrow y = -1$$

$$|AB| = \sqrt{14+9} = 5$$

$$|BC| = \sqrt{\frac{9}{r} + k} = \frac{5}{r} \rightarrow p = 15$$