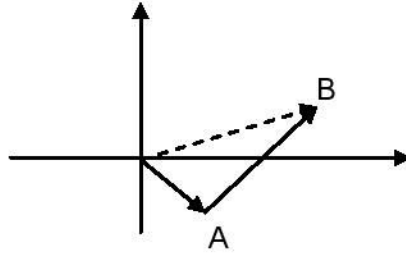




۱-  
حل:

$$\begin{bmatrix} 2 \\ -1 \end{bmatrix} + \begin{bmatrix} 3 \\ 4 \end{bmatrix} = \begin{bmatrix} 5 \\ 3 \end{bmatrix}$$



۲-  
حل:

الف)  $-15/5i + 8j$

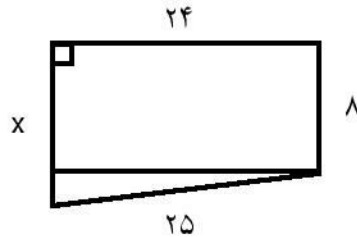
ب)  $\begin{bmatrix} -6 \\ 2 \end{bmatrix} = \begin{bmatrix} -8 \\ 6 \end{bmatrix} = -8i + 6j$

۳-  
حل:

$$24^2 + x^2 = 25^2$$

$$576 + x^2 = 625$$

$$x = 7$$



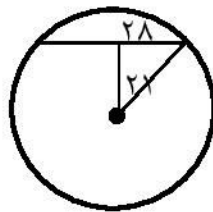
$$25 + 15 + 24 + 8 = 72$$

۴-  
حل:

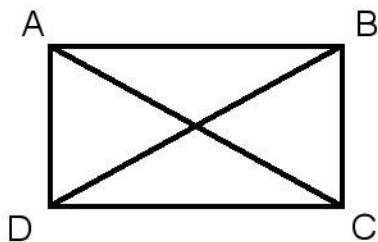
$$x^2 = 21^2 + 28^2$$

$$441 + 784 = 1225$$

$$x = 35$$



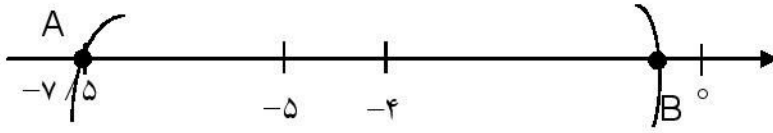
۵-  
حل:



ABD, ABC

اجزای متناظر

$$\begin{cases} AB \\ AP = BC \\ \hat{A} = \hat{B} = 90^\circ \end{cases}$$



- ٦  
حل:

الف)  $5^{21} \div 5 = 5^{20}$

ب) ٧, ٨

- ٧  
حل:

$2^x \div 2^3 = 128$

$2^x \div 2^3 = 2^7 \rightarrow x = 10$

- ٨  
حل:

الف)  $(-0/9)^9 \div (-0/9)^6 = (-0/9)^3$

ب)  $\frac{5^7}{3^7} = \left(\frac{5}{3}\right)^7$

- ٩  
حل:

$A \times B = \frac{(0/4)^5}{5^2} \times \frac{2^5}{\left(\frac{2}{5}\right)^2} = \frac{(0/8)^5}{2^2} = \frac{(0/8)^5}{4}$

- ١٠  
حل:

$\sqrt{88} = 9/3$

$\sqrt{67} = 8/1$

- ١١  
حل:

$0/4 \times 27 = 1/0.8$

- ١٢  
حل:

- ۱۳

حل:

$$\sqrt{2 \times 12} - \sqrt{2 \times 36} - \sqrt{2 \times 25} = 12\sqrt{2} - 6\sqrt{2} - 5\sqrt{2} = \sqrt{2}$$

- ۱۴

حل:

$$2^{3x} = 3$$

$$(2^{3x})^2 + (2^{3x})^2 + (2^{3x})^2 = 9$$