

_____ .
- x
- y

10 - 15
270 20

"			
15x	15	x	
10y	10	y	

$$15x + 10y = 270 : , \quad 270$$

$$x + y = 20 : , \quad 20$$

:

$$\begin{cases} 15x + 10y = 270 \\ x + y = 20 \end{cases}$$

$$\boxed{y = 20 - x}$$

$$15x + 10 \cdot (20 - x) = 270$$

$$15x + 200 - 10x = 270$$

$$5x = 70 \quad /:5$$

$$\boxed{x = 14}$$

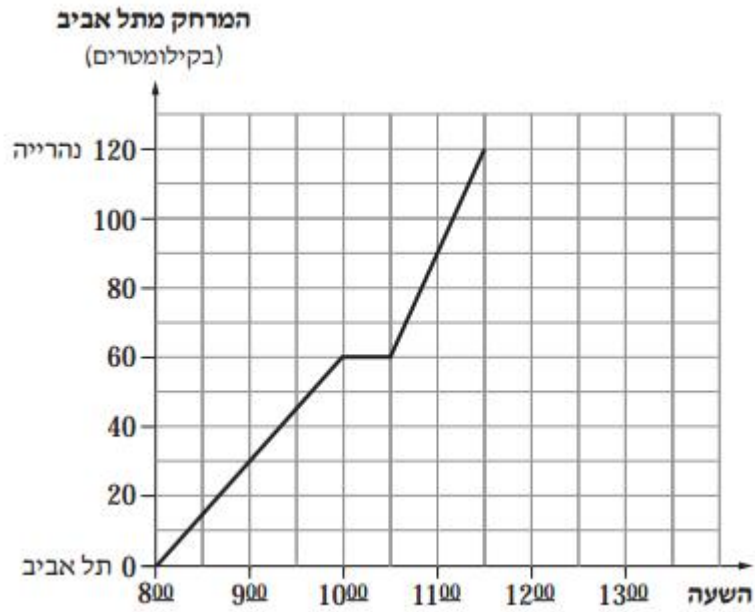
$$y = 20 - 14$$

$$\boxed{y = 6}$$

. 14 :

. 6 : .

הג'רף מתאר את המרחק שצברה רכבת
 שיצאה מתל אביב לנהרייה, לפי הזמן.
 כף שנתה (משפצת) קציר הזמן מצוינת חצוי שעה,
 כף שנתה (משפצת) קציר המרחק מצוינת 10 ק"מ.



.9⁰⁰

" 30

" 90

11:00

10⁰⁰

" 30

" 30

" 60

" 60

.12 x - ABCD AD .
 . (10, 0) D , $x_D = x_A + 12 = -2 + 12 = 10$
 . $x_D = 10$:

.CD (1) .

$$m_{AB} = \frac{y_B - y_A}{x_B - x_A} = \frac{8 - 0}{0 - (-2)} = \frac{8}{2} = 4$$

. $m_{AB} = 4$:

. (2)
 . $m_{CD} = m_{AB} = 4$:

. $m_{CD} = 4$:

. D(10, 0) - $m_{CD} = 4$, CD .

$$y - 0 = 4(x - 10)$$

$$\boxed{y = 4x - 40}$$

. $y = 4x - 40$: CD :

$$d = -5 \quad a_3 = 45 :$$

$$a_n = a_1 + (n-1)d :$$

$$a_3 = a_1 + 2d \quad , a_3 = a_1 + (3-1)d$$

$$d = -5 \quad a_3 = 45 :$$

$$45 = a_1 + 2 \cdot (-5)$$

$$45 = a_1 - 10 \quad / +10$$

$$\boxed{55 = a_1}$$

$$55 \quad :$$

$$a_{11} \quad , \quad 11 -$$

$$a_n = a_1 + (n-1)d :$$

$$a_{11} = a_1 + 10d \quad , a_{11} = a_1 + (11-1)d$$

$$d = -5 \quad a_1 = 55 :$$

$$a_{11} = 55 + 10 \cdot (-5)$$

$$a_{11} = 55 - 50$$

$$\boxed{a_{11} = 5}$$

$$5 \quad 11 - \quad :$$

$$:(\quad) \quad 11 -$$

$$S_n = \frac{n \cdot (a_1 + a_n)}{2}$$

$$S_{11} = \frac{11 \cdot (55 + 5)}{2}$$

$$S_{11} = \frac{11 \cdot 60}{2}$$

$$S_{11} = 330$$

$$S_n = \frac{n[2a_1 + d \cdot (n-1)]}{2}$$

$$S_{11} = \frac{11[2 \cdot 55 - 5 \cdot (11-1)]}{2}$$

$$S_{11} = \frac{11[110 - 5 \cdot 10]}{2}$$

$$S_{11} = \frac{11[110 - 50]}{2}$$

$$S_{11} = 330$$

$$330 \quad 11 - \quad :$$

AB

 ΔABC

$$\cos \sphericalangle BAC = \frac{AB}{AC}$$

$$\cos 60^\circ = \frac{AB}{12} \quad / \cdot 12$$

$$12 \cos 60^\circ = AB$$

$$AB = 6$$

$$6 \quad AB \quad :$$

.BF

$$\sphericalangle BAF = \frac{60^\circ}{2} = 30^\circ \quad , BAC \quad AF -$$

 ΔABF

$$\tan \sphericalangle BAF = \frac{BF}{AB}$$

$$\tan 30^\circ = \frac{BF}{6} \quad / \cdot 6$$

$$6 \cdot \tan 30^\circ = BF$$

$$BF = 3.464$$

$$3.464 \quad BF \quad :$$

.AF

 ΔABF

$$\cos \sphericalangle BAF = \frac{AB}{AF}$$

$$\cos 30^\circ = \frac{6}{AF} \quad / \cdot AF$$

$$AF \cdot \cos 30^\circ = 6 \quad / : \cos 30^\circ$$

$$AF = \frac{6}{\cos 30^\circ}$$

$$AF = 6.928$$

$$6.928 \quad AF \quad :$$

 ΔABF

$$(AF)^2 = (AB)^2 + (BF)^2$$

$$(AF)^2 = 6^2 + 3.464^2$$

$$(AF)^2 = 48$$

$$AF = 6.928$$

$$300 - 150 - 90 = 60 \quad , \quad 150 : 300 \quad .$$

$$P(\text{Black}) = \frac{150}{300} = 0.5, \quad P(\text{Blue}) = \frac{90}{300} = 0.3, \quad P(\text{Red}) = \frac{60}{300} = 0.2$$

$$. 0.5 \quad :$$

$$. 0.2 \quad .$$

$$. \text{---} , \quad .$$

$$P(\text{1st Blue, 2nd Red}) = 0.3 \cdot 0.2 = 0.06$$

$$. 0.06 \quad :$$