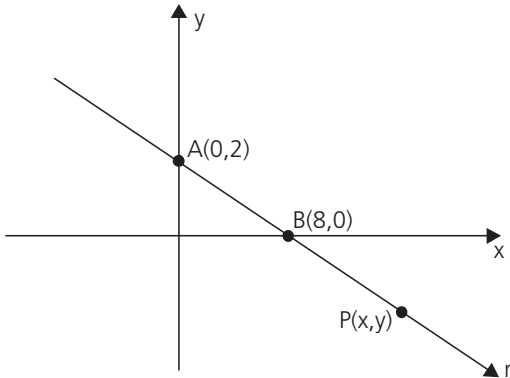


01.



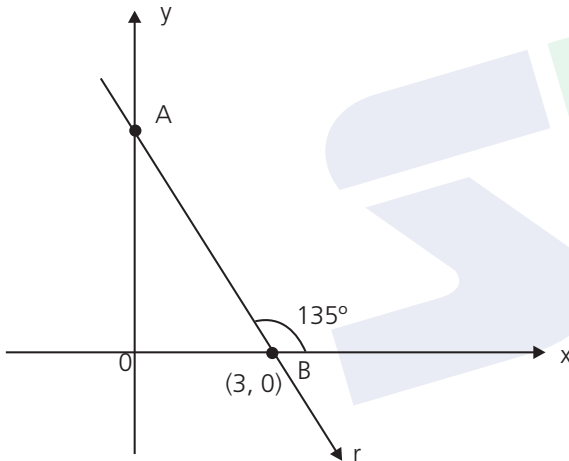
$$\text{coeficiente angular} = \frac{\Delta y}{\Delta x} = \frac{y-2}{x-0} = \frac{0-2}{8-0}$$

Logo:

$$x = 8 - 4y$$

Resposta: C

02.



$$\text{i) } \operatorname{tg} 135^\circ = \frac{y-0}{x-3} = -1 \rightarrow y = -x + 3$$

$$\text{ii) } x_A = 0 \rightarrow y_A = 3 \rightarrow A = (0,3) \text{ e } B = (3,0)$$

Logo:

$$AB = \sqrt{(-3)^2 + (3)^2} = 3\sqrt{2} \text{ m}$$

Resposta: D

03. Seja M o ponto médio do segmento de extremidades $C_2 = (200,30)$ e $C_3 = (50,50)$. Temos:

$$M = \left(\frac{200+50}{2}, \frac{30+50}{2} \right) = (125,40)$$

Portanto, a condição de alinhamento dos pontos $P = (x,y)$, $C_1 = (100,10)$ e $M(125,40)$ é:

$$\frac{\Delta y}{\Delta x} = \frac{40-10}{125-100} = \frac{y-10}{x-100} \Rightarrow \frac{6}{5} = \frac{y-10}{x-100}$$

$$\Rightarrow 5y - 50 = 6x - 600 \Rightarrow 5y - 6x + 550 = 0$$

Resposta: E

04. Tabela

x	y
0	32
100	212
C	F

$$\text{Coeficiente angular} = \frac{\Delta y}{\Delta x} = \frac{212 - 32}{100 - 0} = 1,8$$

Resposta: E

05. Temos A(30,20), B(70,20) e C(60,50). Sendo T(a,b) as coordenadas da torre, devemos ter:

$$\text{I) } d_{TA} = d_{TB} \Rightarrow \sqrt{(a-30)^2 + (b-20)^2} = \sqrt{(a-70)^2 + (b-20)^2} \Rightarrow$$

$$\Rightarrow (a-30)^2 = (a-70)^2 \Rightarrow$$

$$\left\{ \begin{array}{l} a-30 = a-70 \Rightarrow a \notin \mathbb{R} \\ \text{ou} \\ a-30 = -(a-70) \Rightarrow a = 50 \end{array} \right.$$

$$\text{II) } d_{TA} = d_{TC} \Rightarrow \sqrt{(a-30)^2 + (b-20)^2} = \sqrt{(a-60)^2 + (b-50)^2}$$

$$(50-30)^2 + (b-20)^2 = (50-60)^2 + (b-50)^2$$

$$400 + b^2 - 40b + 400 = 100 + b^2 - 100b + 2500$$

$$60b = 1800$$

$$b = 30$$

Logo, T(50,30).

Resposta: E