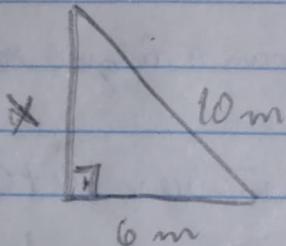
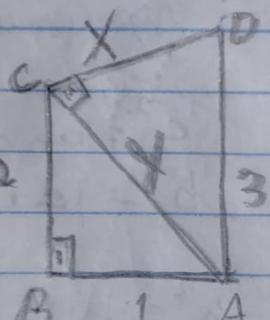
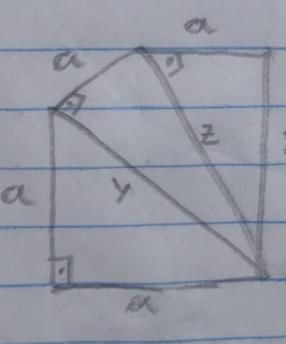


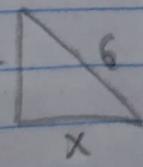
# Ejercicios

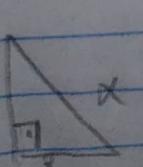
01-  $x^2 = (\sqrt{3})^2 + (\sqrt{4})^2$  A: La hipotenusa es  $\sqrt{7}$   
 $x^2 = 3 + 4$   
 $x = \sqrt{7}$  (B)

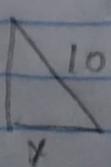
02-   
 $x^2 + 6^2 = 10^2$   
 $x^2 = 100 - 36$   
 $x = \sqrt{64}$   
 $x = 8 \text{ m}$

03-   
 $y^2 = 2^2 + 1^2$   
 $y = \sqrt{5}$   
 $z^2 = (\sqrt{5})^2 + x^2$   
 $9 = 5 + x^2$   
 $x = \sqrt{4}$   
 $x = 2$  (B)

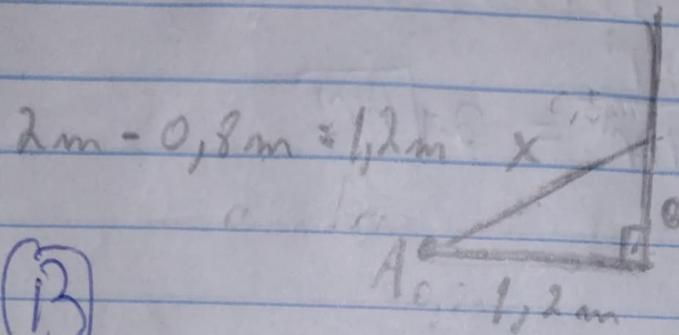
04-   
 $y^2 = a^2 + a^2$   
 $y^2 = 2a^2$   
 $y = a\sqrt{2}$   
 $z^2 = (a\sqrt{2})^2 + a^2$   
 $z^2 = 2a^2 + a^2$   
 $z = a\sqrt{3}$   
 $x^2 = (a\sqrt{3})^2 + a^2$   
 $x^2 = 3a^2 + a^2$   
 $x = 2a$  (B)

05-   
 $6^2 = x^2 + 2^2$   
 $x^2 = 36 - 4$   
 $x = \sqrt{32}$   
 $A = \frac{b \cdot h}{2}$   
 $A = \frac{(4\sqrt{2}) \cdot 2}{2}$  (C)

06-   
 $x^2 = 6^2 + 8^2$   
 $x^2 = 100$   
 $x = 10$  (A)

  
 $10^2 = (2y)^2 + y^2$   
 $100 = 5y^2$   
 $y = \sqrt{\frac{100}{5}}$   
 $y = 2\sqrt{5}$

07 - Aranha 16 cm/s  $\{$  5 segundos depõe:  $A = 80 \text{ cm}^2$   
 Formiga 10 cm/s  $\}$   $F = 50 \text{ cm}$



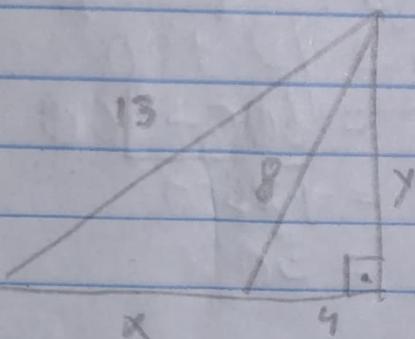
$$x^2 = 0,5^2 + 1,2^2$$

$$x^2 = 0,25 + 1,44$$

$$x = \sqrt{1,69}$$

$$x = 1,3 \text{ m}$$

08 -



$$8^2 = y^2 + 4^2$$

$$y^2 = 64 - 16$$

$$y = \sqrt{48}$$

$$13^2 = \sqrt{48}^2 + (x+4)^2$$

$$169 = 48 + x^2 + 8x + 16$$

$$x^2 + 8x - 105 = 0$$

$$\Delta = 64 - 4 \cdot 1 \cdot (-105)$$

$$\Delta = 484$$

(D)

$$x_1 = \frac{-8+22}{2} = \boxed{7 \text{ m}}$$

$$x_2 = \frac{-8-22}{2} = -15$$

09 - Fórmula de Heron:

$$P = a + b + c / 2$$

$$P = 14 + 15 + 13 / 2$$

$$P = 21$$

$$A = \sqrt{21(21-14)(21-15)(21-13)}$$

$$A = \sqrt{21 \cdot 7 \cdot 6 \cdot 8}$$

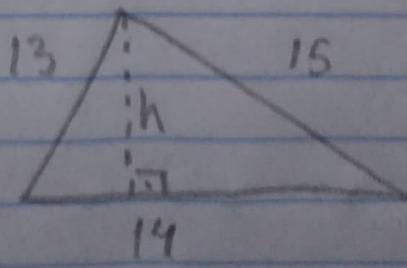
$$A = 84$$

$$A\Delta = \frac{b \cdot h}{2}$$

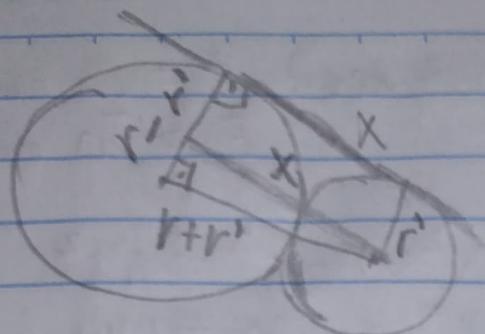
$$84 = \frac{14 \cdot h}{2}$$

$$168 = 14h$$

$$h = 12$$



10-



$$(r+r')^2 = (r-r')^2 + x^2$$

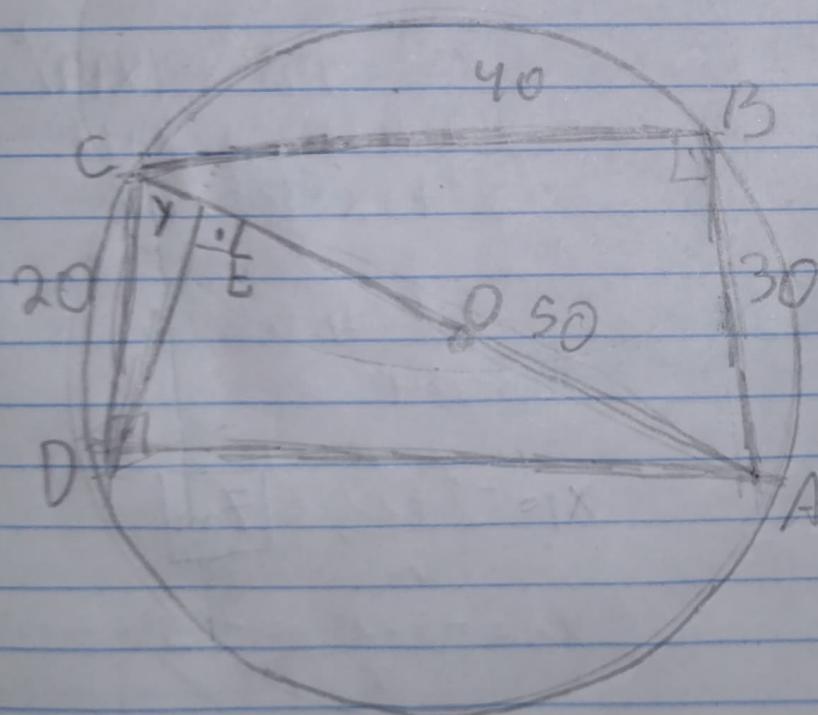
$$x^2 = (r+r')^2 - (r-r')^2$$

$$x^2 = r^2 + 2rr' + r'^2 - r^2 + 2rr' - r'^2$$

$$x^2 = 4rr'$$

$$x = \sqrt{4rr'} = 2\sqrt{rr'}$$

11-



$$\overline{CA}^2 = 40^2 + 30^2$$

$$\overline{CA}^2 = 1600 + 900$$

$$\overline{CA} = \sqrt{2500}$$

$$\overline{CA} = 50$$

$$\overline{CDA} = \overline{CED} \sim AA$$

$$\frac{20}{50} = \frac{y}{20}$$

$$y = \frac{400}{50}$$

$$y = 8$$

(C)