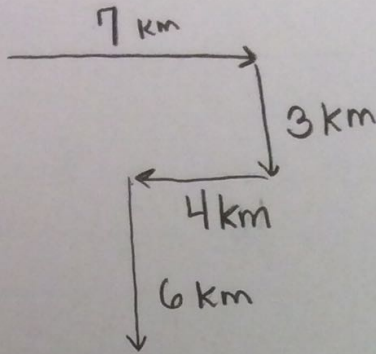


10.

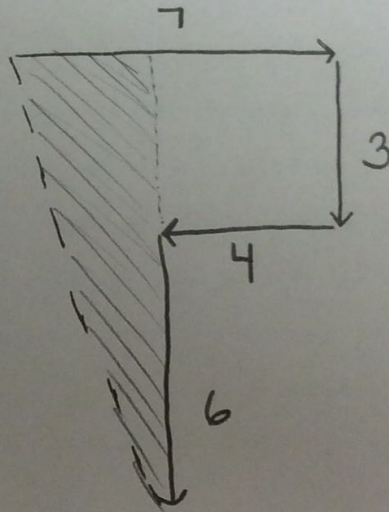
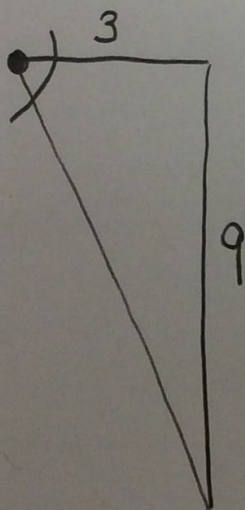


distance

$$7 + 3 + 4 + 6 = 20 \text{ km}$$



⇓ displacement



$$a^2 + b^2 = c^2$$

$$3^2 + 9^2 = c^2$$

$$9 + 81 = c^2$$

$$\sqrt{90} = c$$

$$9.5 \text{ km} = c$$

displacement

angle (notice dot, this is where you start)

$$\sin \theta = \frac{O}{H}$$

$$\theta = \sin^{-1} \left(\frac{3}{9.5} \right)$$

$$\theta = \sin^{-1} (.316)$$

$$\theta = 18.5^\circ$$