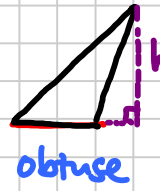
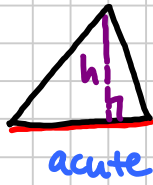


10.4) Areas of Triangles & Trapezoids

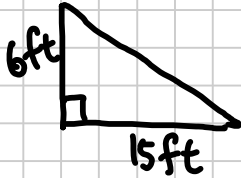
Thm 10.3

$$A = \frac{1}{2}bh$$

↑ height
↗ base → $b \perp h$

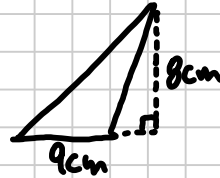


ex 1) Find the area

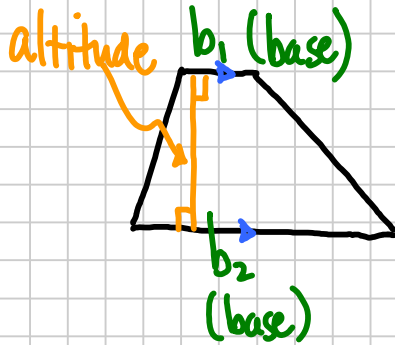


$$\begin{aligned} A &= \frac{1}{2}bh \\ &= \frac{1}{2}(15)(6) \\ &= 45 \text{ ft}^2 \end{aligned}$$

ex 2) area



$$\begin{aligned} A &= \frac{1}{2}bh \\ &= \frac{1}{2}(9)(8) \\ &= 36 \text{ cm}^2 \end{aligned}$$

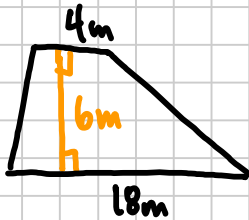


Thm 10.4

$$A = \frac{1}{2}h(b_1 + b_2)$$

↖ altitude

ex 3)



Find the area of the trapezoid.

$$\begin{aligned} A &= \frac{1}{2}h(b_1 + b_2) \\ &= \frac{1}{2}(6)(4 + 18) \\ &= \frac{1}{2}(6)(22) = 66 \text{ m}^2 \end{aligned}$$