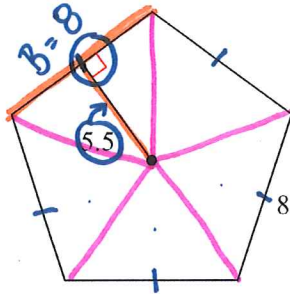


3.1 Areas of 2D Figures – Part 2

Ex 2. Find the area of each **regular polygon** (a shape where all sides are equal length and all angles are equal in measure) by breaking it into more simple shapes. Round to the nearest tenth where necessary.

a)



Pentagon

$$A = \frac{bh}{2} \times 5$$

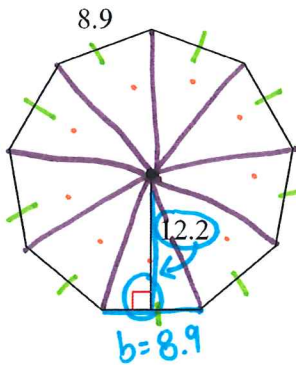
$$= \frac{8 \times 5.5}{2} \times 5$$

$$= \frac{44}{2} \times 5$$

$$= 22 \times 5$$

$$= 110 \text{ units}^2$$

6 = hexa
 7 = sept
 8 = octa
 9 = nona
 10 = deca



Nonagon • 9 sides

$$A = 9 \times \frac{bh}{2}$$

$$A = 9 \times \frac{8.9 \times 12.2}{2}$$

$$A = 9 \times \frac{108.58}{2}$$

Area of one triangle

$$A = 9 \times 54.29$$

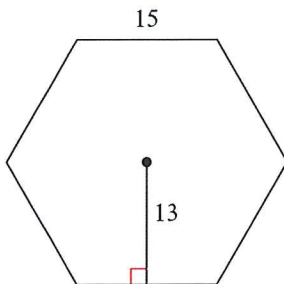
$$A = 488.61 \text{ units}^2$$

$$A = 488.6 \text{ units}^2$$

3.1 Practice – Part 2

2. Find the area of each regular polygon.

a)



b)

