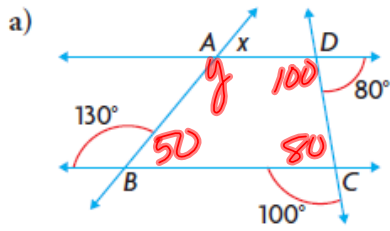


p. 395 #8a)



$(n-2) \times 180^\circ = \text{sum of interior angles}$

$$(4-2) \times 180^\circ = 360^\circ$$

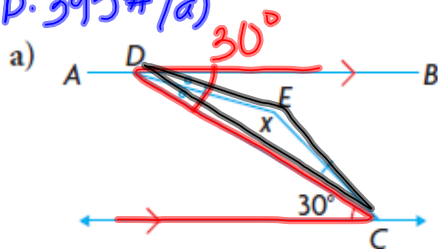
$$360 - 50 - 100 - 80 = y$$

$$y = 130^\circ$$

$$x = 180 - 130$$

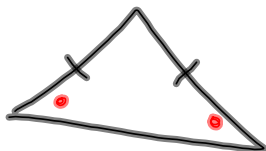
$$= \underline{\underline{50^\circ}}$$

p. 395 #7a)



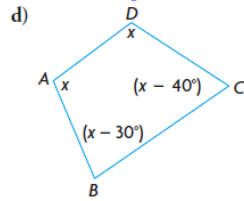
$\angle D = 30^\circ$ (alternate angle)

$$\angle C = 15^\circ \quad (30 \div 2 = 15^\circ)$$



$$\begin{aligned} \angle x &= 180 - 15 - 15 \\ &= 150^\circ \end{aligned}$$

p. 395 #8d



4 sides = 360° (sum of interior angles)

$$360 = x + (x - 30) + (x - 40) + x$$

$$360 = 4x - 70$$

$$\frac{430}{4} = \frac{4x}{4}$$

$$x = 107.5$$

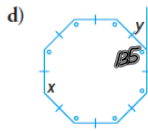
$$\angle A = 107.5$$

$$\begin{aligned} \angle B &= 107.5 - 30 \\ &= 77.5 \end{aligned}$$

$$\begin{aligned} \angle C &= 107.5 - 40 \\ &= 67.5 \end{aligned}$$

$$\angle D = 107.5$$

p. 395 #7d



Octagon!

Interior Angle

$$(8 - 2) \times 180^\circ = 1080^\circ \text{ (sum of interior angles)}$$

$$x = \frac{1080}{8} \text{ (because it is a regular polygon)}$$

$$= 135^\circ$$

Exterior Angle

$$y = 180 - 135$$

$$= 45^\circ$$

OR →

$$\begin{aligned} \text{Regular Polygon} &= 360^\circ \\ &\text{(sum of exterior angles)} \\ y &= \frac{360}{8} \\ &= 45^\circ \end{aligned}$$