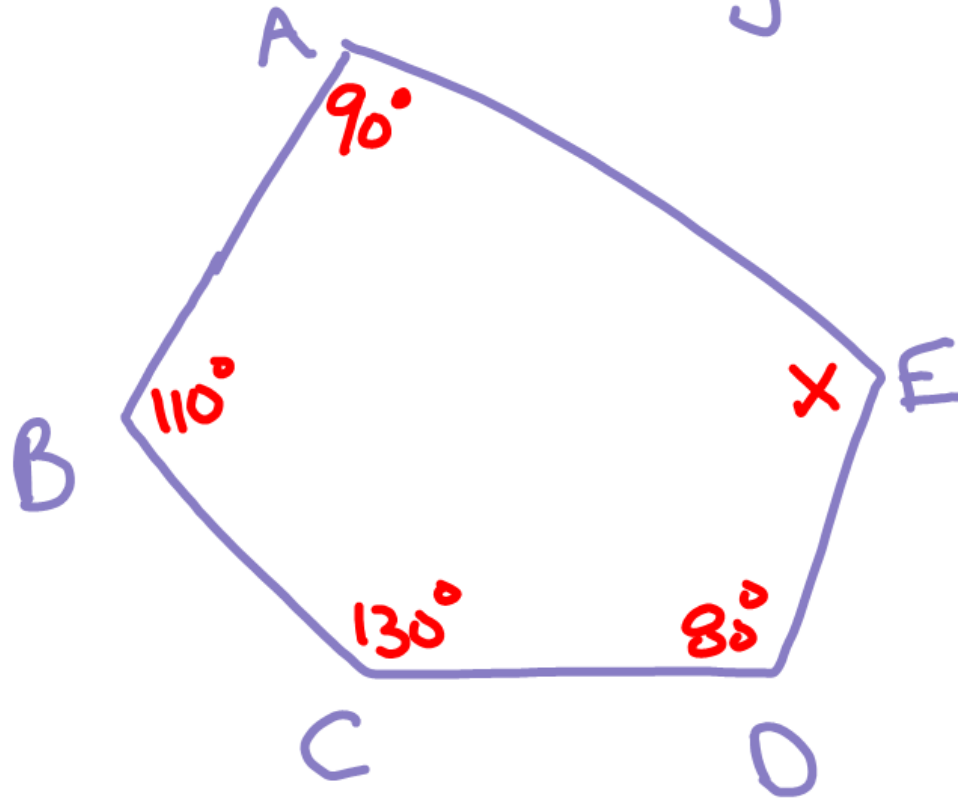


Find the missing angle measure.



$$X = 540 - 410$$
$$= 130^\circ$$

Degrees in pentagon:  $5 - 2 = 3$   
 $3 \cdot 180 = 540^\circ$

## 8.1b Sum of Interior & Exterior $\angle$ 's

Love to add!

### Sum of Interior $\angle$ 's

$$(n-2) \cdot 180 = \text{Sum of } \angle\text{'s}$$

\*  $n$  = number of sides

### Examples

① Find Sum for an 11-gon

$$11 - 2 = 9$$

$$9 \cdot 180 = 1620^\circ$$

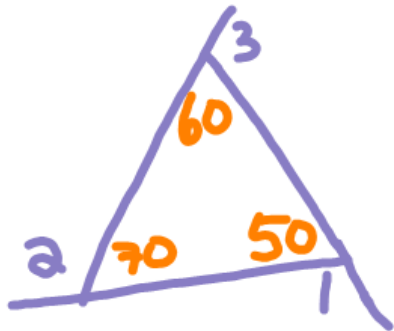
② What polygon has angle sum of  $900^\circ$ ?

$$900 \div 180 =$$

$$\begin{array}{r} 5 \text{ triangles} \\ + 2 \\ \hline 7 \leftarrow \text{heptagon} \end{array}$$

# Exterior Angles

They add up to  $360^\circ$



\* line =  $180^\circ$

$\angle$ 's 1, 2, 3 are exterior angles.

$$\angle 1 = 130^\circ \quad (180 - 50 = 130)$$

$$\angle 2 = 110 \quad (180 - 70 = 110)$$

$$\angle 3 = 120 \quad (180 - 60 = 120)$$

+

---

Add to  $360^\circ$