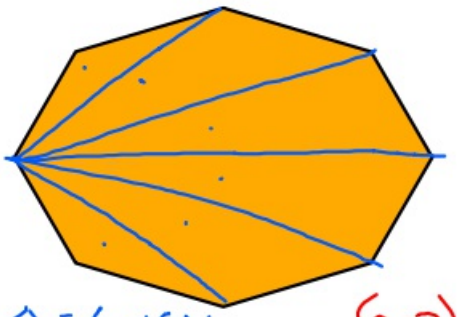
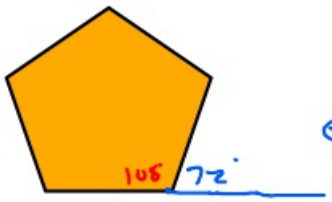
1-6-20 2nd Geo

① How many degrees inside an octagon?



$6\triangle = 6 \cdot 180^\circ$
$= 1080^\circ$

$(n-2) \cdot 180^\circ$



exterior angle

$\frac{360}{5}$

$\text{ext}\angle = \frac{360}{n}$

② What is the exterior angle of a regular decagon? What is the interior angle?

$\text{ext}\angle = \frac{360}{n}$
$= \frac{360}{10}$
$= 36^\circ$

(3) How many sides does a regular polygon have if the interior angle is 170°?

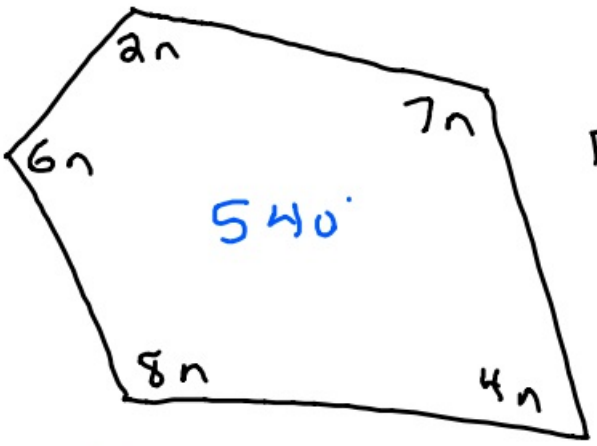
$$\text{ext}\angle = \frac{360}{n}$$

$$n = \frac{360}{\text{ext}\angle}$$

$$n = \frac{360}{10}$$

$$n = 36$$

(4)



Find n.

$(n-2)\cdot 180°$

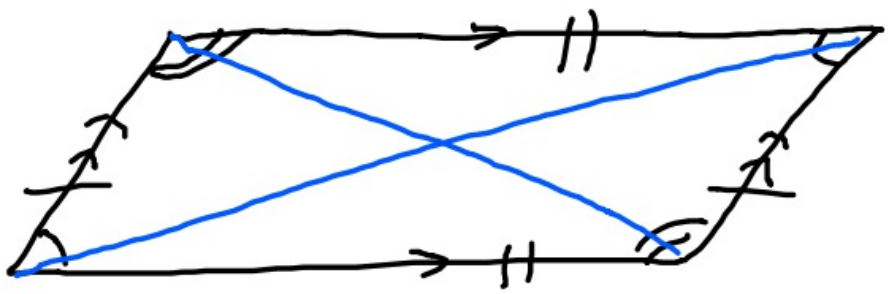
$(5-2)\cdot 180°$

$8n+4n+7n+2n+6n = 540°$

$27n = 540$

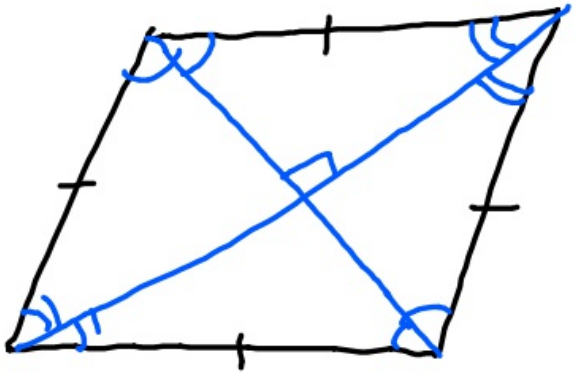
$n = 20°$

Parallelogram



1. opposite ∠'s are =
2. opposite sides are =
3. Consecutive ∠'s are supplementary.
4. Diagonals bisect each other

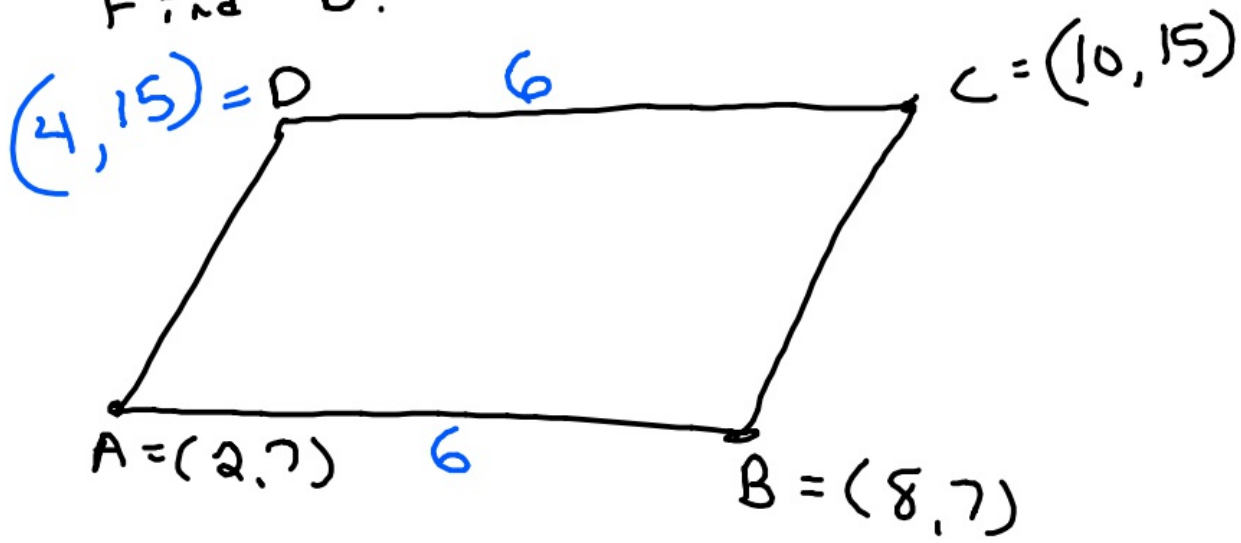
Rhombus



1. Diagonals are ⊥ to each other
2. Diagonals bisect the angles.

⑤ Parallelogram ABCD

Find D.



⑥ Parallelogram ABCD