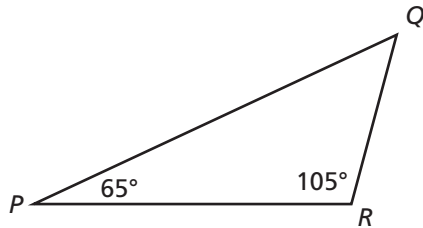


GRADE 10 Focus on Sunshine State Standards: Benchmark Tests
MA.912.G.2.2 Benchmark Pre-Test (Multiple Choice)

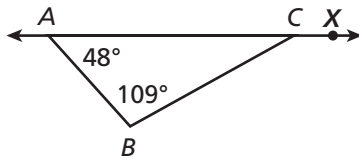
1. A Triangle PQR is shown below.



What is the measure of $m\angle Q$?

- A. 10°
- B. 15°
- C. 25°
- D. 75°

2. A triangle is shown below.



What is $m\angle BCX$?

- F. 61°
- G. 71°
- H. 32°
- I. 157°

3. What is the sum of the interior angles in a regular hexagon?

- A. $1,440^\circ$
- B. $1,080^\circ$
- C. 900°
- D. 720°

4. The largest angle in a convex quadrilateral measures 102° . The other three angles can have the same measure. Which of the following statements is true?

- F. The three congruent angles are acute.
- G. The three congruent angles are obtuse.
- H. One of the three angles is acute and the other two angles are obtuse.
- I. The three angles each measure 85° .

5. The table indicates the measures of the four angles in a quadrilateral.

A	B	C	D
$2x$	$2x + 40$	$x + 50$	$5x - 10$

What are the angles in order from least to greatest measure?

- A. $m\angle B, m\angle A, m\angle C, m\angle D$
- B. $m\angle A, m\angle B, m\angle C, m\angle D$
- C. $m\angle A, m\angle C, m\angle B, m\angle D$
- D. $m\angle C, m\angle B, m\angle A, m\angle D$

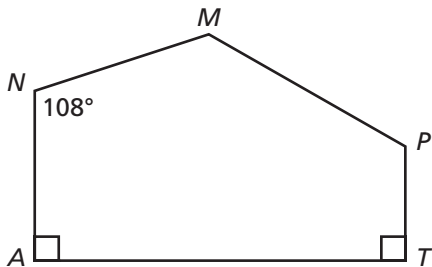
6. What is the measure of each interior angle in a regular decagon?

- F. 36°
- G. 72°
- H. 144°
- I. 180°

GRADE 10 Focus on Sunshine State Standards: Benchmark Tests
10 MA.912.G.2.2 Benchmark Pre-Test (Gridded Response)

Use the Gridded Response Answer Sheet.

7. A pentagon is shown below.



What is $m\angle M + m\angle P$ in degrees?

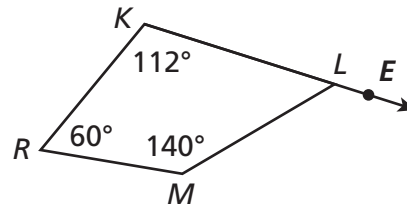
8. In a convex quadrilateral $ABCD$, $m\angle A = 102^\circ$, $m\angle B = 70^\circ$, and $m\angle C = 110^\circ$. What is the measure in degrees of the obtuse angle exterior to $\angle D$ in degrees?

9. Use the table shown below. It shows relationships among the interior angles of convex pentagon $DEFGH$.

D	E	F	G	H
$2n$	$n + 5$	$n - 5$	$2n$	$4n$

What is the measure in degrees of the largest angle in $DEFGH$ in degrees?

10. A quadrilateral is shown below.



What is the measure in degrees of $\angle MLE$, the angle exterior to $\angle KLM$?

11. What is the measure in degrees of each interior angle in a regular polygon with ten sides?

12. In a convex pentagon $DEFGH$, three of the angles have the same measure. The other two angles also have the same measure and are each 10° more than the other three angles.

$$m\angle D = m\angle E = m\angle F = x^\circ$$

$$m\angle G = m\angle H = (x + 10^\circ)$$

What is the measure in degrees of the smallest angle?