

NAME: \_\_\_\_\_

*G.G.36: Investigate, justify, and apply theorems about the sum of the measures of the interior and exterior angles of polygons*

1. 080109a, P.I. G.G.36

The sum of the measures of the interior angles of an octagon is

- [A]  $360^\circ$                       [B]  $540^\circ$   
[C]  $180^\circ$                       [D]  $1,080^\circ$

2. 010514a, P.I. G.G.36

What is the sum, in degrees, of the measures of the interior angles of a pentagon?

- [A] 180    [B] 360    [C] 540    [D] 900

3. 080428a, P.I. G.G.36

What is the sum, in degrees, of the measures of the interior angles of a stop sign, which is in the shape of an octagon?

- [A] 1,880                      [B] 1,440  
[C] 1,080                      [D] 360

4. 080820a, P.I. G.G.36

The measures of five of the interior angles of a hexagon are  $150^\circ$ ,  $100^\circ$ ,  $80^\circ$ ,  $165^\circ$ , and  $150^\circ$ . What is the measure of the sixth interior angle?

- [A]  $75^\circ$     [B]  $105^\circ$     [C]  $180^\circ$     [D]  $80^\circ$

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[1] D

[2] C

[3] C

[4] A