

NAME: _____

G.G.37: Investigate, justify, and apply theorems about each interior and exterior angle measures of regular polygons

1. fall0827ge, P.I. G.G.37

What is the measure of an interior angle of a regular octagon?

[A] 60° [B] 120° [C] 135° [D] 45°

2. 060516a, P.I. G.G.37

The accompanying figure represents a section of bathroom floor tiles shaped like regular hexagons.



What is the measure of angle ABC ?

[A] 90° [B] 150°
[C] 120° [D] 60°

3. 060213a, P.I. G.G.37

What is the measure, in degrees, of each exterior angle of a regular hexagon?

[A] 45 [B] 135 [C] 120 [D] 60

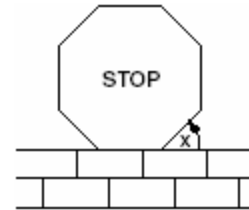
4. 060423a, P.I. G.G.37

Melissa is walking around the outside of a building that is in the shape of a regular polygon. She determines that the measure of one exterior angle of the building is 60° . How many sides does the building have?

[A] 3 [B] 9 [C] 12 [D] 6

5. 080507a, P.I. G.G.37

A stop sign in the shape of a regular octagon is resting on a brick wall, as shown in the accompanying diagram.

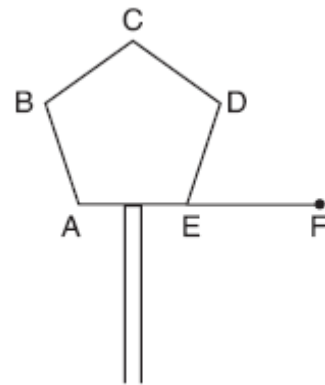


What is the measure of angle x ?

[A] 60° [B] 120° [C] 135° [D] 45°

6. 060718a, P.I. G.G.37

One piece of the birdhouse that Natalie is building is shaped like a regular pentagon, as shown in the accompanying diagram.



If side AE is extended to point F , what is the measure of exterior angle DEF ?

[A] 36° [B] 108° [C] 144° [D] 72°

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[1] C

[2] C

[3] D

[4] D

[5] D

[6] D