



1. Find the sum of the angle measures of a nonagon.

The sum is degrees.

2. The measure of an exterior angle of a regular polygon is given below. Find the measure of an interior angle. Then find the number of sides.

45

What is the measure of an interior angle?

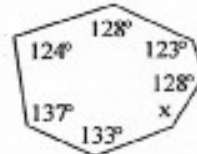
How many sides does the polygon have?

3. Find the measures of an interior angle and an exterior angle of a regular pentagon.

The measure of an interior angle is .

The measure of an exterior angle is .

4. Find the measure of angle x in the figure.



Note: Angles not drawn to scale.

Angle x measures °.

5. Find the measure of an exterior angle of a regular 25-gon.

The measure of an exterior angle of a regular 25-gon is °.

(Type an integer or a decimal.)

6. Determine the measure of an interior angle of a regular 9-sided polygon. If a side of the polygon is extended, determine the supplementary angle of an interior angle.

The measure of each interior angle of a regular 9-sided polygon is °.

The measure of each supplementary angle of each interior angle of a regular 9-sided polygon is °.



Geometry

Unit 3—polygons

Day 10—polygon & angle measure practice

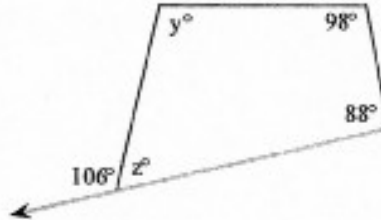
Name: _____

Period: _____

7. The sum of the angle measures of a polygon with n sides is 3960. Find n .

$n = \square$

8. Find the value of each variable.



$y = \square$

$z = \square$

Answer Key

1. 1260

2. 135
8

3. 108
72

4. 127

5. 14.4

6. 140
40

7. 24

8. 100
74