

1. Determine the sum of the measures of the interior angles of this polygon.



- a. 1080° b. 1440°
c. 720° d. 540°



4. Determine the sum of the measures of the angles in a 9-sided convex polygon.

- a. 1720° b. 1440° c. 1080° d. 1260°

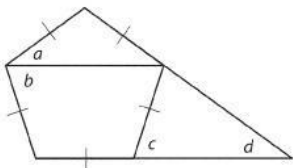


2. Each interior angle of a regular convex polygon measures 144° . How many sides does the polygon have?

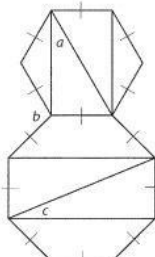
- a. 10 b. 11 c. 8 d. 9



3. Determine the value of a and d .



- a. $54^\circ, 36^\circ$
b. $30^\circ, 36^\circ$
c. $36^\circ, 36^\circ$
d. $32^\circ, 36^\circ$
e. $34^\circ, 36^\circ$



Use for Question
5, 6, and 7

5. Determine the value of b .

- a. 95° b. 100°
c. 120° d. 105°



6. Determine the value of a .

- a. 60° b. 34°
c. 30° d. 28°



7. Determine the value of c .

- a. 22.5° b. 30°
c. 67.5° d. 26.5°



Short Answer (18pts)

6. Determine the sum of the measures of the angles in an 18-sided convex polygon. Show your calculation.

Sum of Interior angles = _____ 2

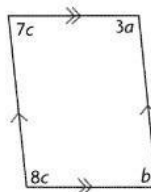
7. Each interior angle of a regular convex polygon measures 156° . How many sides does the polygon have? Show your calculations.

of Sides = _____ 3

8. Abbie is measuring the exterior angles of a convex pentagon. So far, she has measured 90° , 90° , 120° , and 40° . What is the measure of the last **exterior** angle? Show your calculation.

Angle = _____ 2

9. Determine the values of a , b , and c .



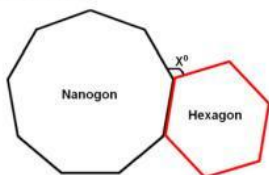
$a =$ _____

$b =$ _____

$c =$ _____

3

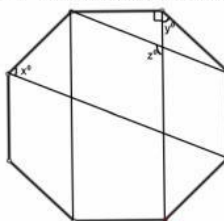
10. In the diagram below, two regular polygons are shown. Calculate x .



$x^\circ =$ _____

3

11. Given the Octagon below, Calculate x , y and z .



$x =$ _____

$y =$ _____

$z =$ _____

5

