1. In ΔABC, $m\angle A = 42°$ and $m\angle C = 57°$.
Find $m\angle B$.

$m\angle B =$ 81

2. Find all the angles measures in the diagram below.

$m\angle 1 =$ 90

$m\angle 2 =$ 90

$m\angle 3 =$ 40

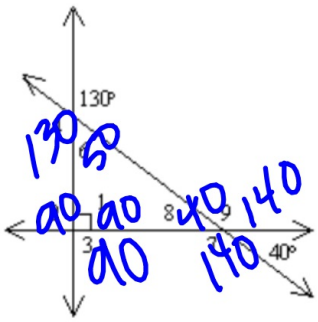
$m\angle 4 =$ 130

$m\angle 6 =$ 50

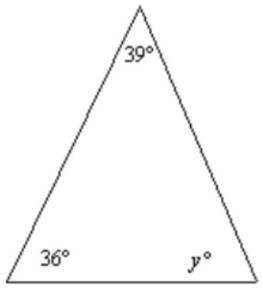
$m\angle 7 =$ 140

$m\angle 8 =$ 40

$m\angle 9 =$ 140



3. Find $m\angle y$.



- 45°
- 15°
- 36°
- 105°

4. Classify a triangle with side lengths 23 inches, 23 inches, and 21 inches.

Isosceles

5. Classify a triangle with angle measures 58°,104°, and 18°.

obtuse

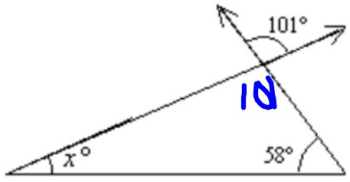
scalene

6. Decide whether a triangle could have angle measures of 48° , 22° , and 106° . Explain your reasoning.

NO

Sum ≠ 180

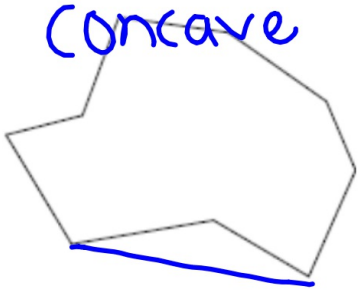
7. Find $m\angle x$.



- 43
- 79
- 21
- 32

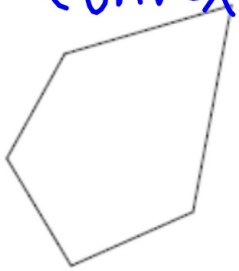
8. Identify each polygon as convex or concave.

A) Concave

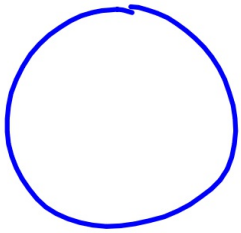


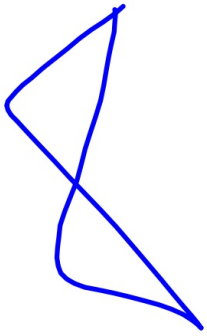
Convex

B)

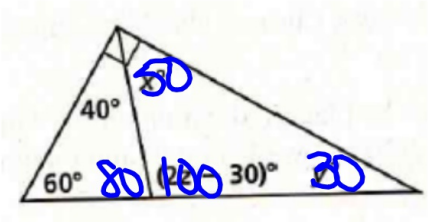


9. Draw a shape that would NOT be a polygon. Explain why it is not.



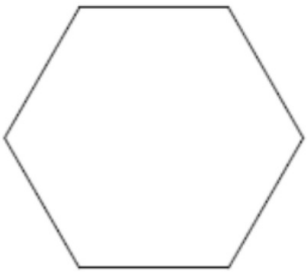


10. Find the values of x, y and z.



$$2z - 30 = 100$$
$$2z = 130$$
$$z = 65$$

11. Name the polygon below. Then classify it by the number of sides. Then find the sum of the interior angles of the polygon.

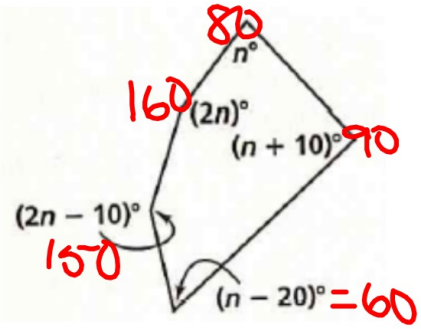


$(6-2)\cdot 180$
$= 720$
6 sides hexagon

12. Name the polygon below. Then classify it by the number of sides. Then find the sum of the interior angles of the polygon.

6 sides
hexagon
720

13. Find the angle measures.



80
160
90
150
60

$7n - 20 = 540$

$7n = 560$

$n = 80$