**Tell whether the figure is a polygon and whether it is convex or concave**

1. 
2. 
3. 

**How many sides do each of the following polygons have?**

**4.** Hexagon

**5.** Dodecagon

**6.** Pentagon

**Answer the following questions.**

**7.** If a regular Hexagon has a side length of x+3 what is the perimeter?

**8.** If an isosceles triangle has a base of y+1 and sides of 2x-3 and 4x-7 find x.

**9.** Name something that is shaped like a pentagon then draw a picture of it.

**10.** What is the angle measure of each interior angle of an equiangular triangle?

**For Exercises 11–14, draw the regular polygons labeling sides and angles.**

**11.** Octagon **12.** Dodecagon

**13.** Parallelogram **14.** Hexagon

**ANSWERS**

**Tell whether the figure is a polygon and whether it is convex or concave**

1.  **POLYGON, CONVEX**
2.  **POLYGON, CONVEX**
3.  **POLYGON, CONCAVE**

**How many sides do each of the following polygons have?**

**4.** Hexagon**6**

**5.** Dodecagon **12**

**6.** Pentagon **5**

**Answer the following questions.**

**7.** If a regular Hexagon has a side length of x+3 what is the perimeter? **X = 3**

**8.** If an isosceles triangle has a base of y+1 and sides of 2x-3 and 4x-7 find x. **X = 2**

**9.** Name something that is shaped like a pentagon then draw a picture of it.

**THE PENTAGON**

**10.** What is the angle measure of each interior angle of an equiangular triangle?

**60°**

**For Exercises 11–14, draw the regular polygons labeling sides and angles.**

**11.** Octagon **12.** Dodecagon

 

**13.** Parallelogram **14.** Hexagon