Codeyoung

Application WS_G8_Classification and Angle Sum Property for Polygon

1. Is it possible to construct a polygon, the sum of whose interior angles is 20 right angles? If yes, find the number of sides of the polygon.

2. The angle of a hexagon are in the ratio 1 : 2 : 3 : 4 : 6 : 8. Find the measure of the smallest and the biggest angles.

3. One of the angle of a polygon is 100° and each of the other angles is 110°. Find the number of sides in the polygon.

4. The ratio of number two sides of two regular polygons is 3 : 4 and the ratio of the sum of their interior angles is 1 : 2. Find the number of sides of each polygon.

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5. The four angle of a hexagon are 60°, 90°, 150° and 180° and the other two angles are equal. Find the measure of these equal angles.

6. The measure of four angles of a heptagon is equal and the measure of the other three angles is 120° each. Find the measure of unknown angles.

7. The four angle of a pentagon are equal and the fifth angle measure 140°. Find the measure of four equal angles.

8. The seven angle of an octagon are 132° each. Find the measure of the eighth angle.

9. The angles of a pentagon are $x°$, $(x - 5)°$, $(x + 15)°$, $(3x - 44)°$ and $(x - 70)°$. Find x.

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**10.** The angle of a pentagon are $(x - 1)°$, $(x - 2)°$, $(x - 3)°$, $(x - 4)°$ and $(x - 5)°$ . Find the value of x and the measure of all angles.

**11.** Four of the angles of a pentagon are equal. The fifth angle is 40°. Find the angles.

**12.** Each interior angle of a polygon is 150°. Find the sum of interior angles of a polygon which has half the number of sides of the given polygon.

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