

Polygon & Angle Pairs

Geometry · Grade 7

● Easy · 10 Questions

Solve each problem. Show your work in the space provided. Write your answer on the line.

1. A quadrilateral has angles 90° , 90° , 110° . Find the fourth angle.

Answer: _____

2. Find the sum of interior angles of a quadrilateral.

Answer: _____

3. Find the sum of interior angles of a pentagon.

Answer: _____

4. Each angle of a regular hexagon measures ____°

Answer: _____

5. A regular pentagon has 5 equal interior angles. Find each angle.

Answer: _____

6. Find the measure of each interior angle in a regular octagon.

Answer: _____

7. Find the sum of interior angles of a triangle.

Answer: _____

8. Find the sum of interior angles of a heptagon (7 sides).

Answer: _____

9. Each angle of a regular triangle (equilateral) is ____°.

Answer: _____

10. Each angle of a regular quadrilateral (square) is ____°.

Answer: _____

Answer Key

Polygon & Angle Pairs — Easy

1. **70°**

Quadrilateral angle sum = 360°. $360^\circ - 90^\circ - 90^\circ - 110^\circ = 70^\circ$.

2. **360°**

$(n-2) \times 180^\circ = (4-2) \times 180^\circ = 360^\circ$.

3. **540°**

$(n-2) \times 180^\circ = (5-2) \times 180^\circ = 540^\circ$.

4. **120°**

Sum = $(6-2) \times 180^\circ = 720^\circ$. $720^\circ \div 6 = 120^\circ$.

5. **108°**

Sum = 540°. $540^\circ \div 5 = 108^\circ$.

6. **135°**

Sum = $(8-2) \times 180^\circ = 1080^\circ$. $1080^\circ \div 8 = 135^\circ$.

7. **180°**

$(n-2) \times 180^\circ = (3-2) \times 180^\circ = 180^\circ$.

8. **900°**

$(n-2) \times 180^\circ = (7-2) \times 180^\circ = 900^\circ$.

9. **60°**

Sum = 180°. $180^\circ \div 3 = 60^\circ$.

10. **90°**

Sum = 360°. $360^\circ \div 4 = 90^\circ$.