

Triangle Angle Sum

Geometry · Grade 5

◆ Medium · 10 Questions

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

- Two angles are on a straight line. One is 65° .
Find the other angle.

Answer: _____

- A triangle has angles of 50° and 70° .
Find the third angle.

Answer: _____

3. Two angles are at a point (around a point). One is 130° .
Find the other.

Answer: _____

4. Three angles meet at a point on one side of a line.
Two of them are 40° and 65° .
Find the third.

Answer: _____

5. Two angles on a straight line. One is 73° . Find the other.

Answer: _____

6. A triangle has angles 35° and 95° . Find the third.

Answer: _____

7. Two vertically opposite angles. One is 64° . Find the other.

Answer: _____

8. An angle is split into two equal parts of 38° each. Find the original angle.

Answer: _____

9. Three angles on a straight line: 45° , 60° , and ____°.

Answer: _____

10. Two complementary angles, one is twice the other. Find both.

Answer: _____

Answer Key

Triangle Angle Sum — Medium

1. **115°**

Angles on a straight line add to 180° . $180^\circ - 65^\circ = 115^\circ$.

2. **60°**

Sum of triangle angles = 180° . $180^\circ - 50^\circ - 70^\circ = 60^\circ$.

3. **230°**

Angles around a point add to 360° . $360^\circ - 130^\circ = 230^\circ$.

4. **75°**

All three lie on a straight line: $40^\circ + 65^\circ + ? = 180^\circ$. $? = 75^\circ$.

5. **107°**

$180^\circ - 73^\circ = 107^\circ$.

6. **50°**

$180^\circ - 35^\circ - 95^\circ = 50^\circ$.

7. **64°**

Vertically opposite angles are equal.

8. **76°**

$2 \times 38^\circ = 76^\circ$.

9. **75°**

$180^\circ - 45^\circ - 60^\circ = 75^\circ$.

10. **30° and 60°**

$x + 2x = 90^\circ$. $3x = 90^\circ$. $x = 30^\circ$.