

Triangle Angle Sum

Geometry · Grade 5

Score: _____ / 10

● Easy · 10 Questions

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

1. A right triangle has angles 90° and 35° . Find the third angle.

Answer: _____

2. Two angles of a triangle measure 40° and 80° . Find the third angle.

Answer: _____

3. A triangle has two equal angles of 50° each. Find the third angle.

Answer: _____

4. On a straight line, one angle is 95° . Find the other angle.

Answer: _____

5. Two angles around a point measure 140° and 80° . Find the third angle.

Answer: _____

6. Two complementary angles. One is 35° . Find the other.

Answer: _____

7. Two supplementary angles. One is 120° . Find the other.

Answer: _____

8. A triangle has angles 30° , 60° , ____°.

Answer: _____

9. A triangle has angles 45° , 45° , $___\circ$.

Answer: _____

10. A right triangle has angles 90° and 50° . Find the third.

Answer: _____

Answer Key

Triangle Angle Sum — Easy

1. **55°**

$$180^\circ - 90^\circ - 35^\circ = 55^\circ$$

2. **60°**

$$180^\circ - 40^\circ - 80^\circ = 60^\circ$$

3. **80°**

$$\text{Triangle angles sum to } 180^\circ. 180^\circ - 50^\circ - 50^\circ = 80^\circ$$

4. **85°**

$$\text{Angles on a line sum to } 180^\circ. 180^\circ - 95^\circ = 85^\circ$$

5. **140°**

$$\text{Angles around a point sum to } 360^\circ. 360^\circ - 140^\circ - 80^\circ = 140^\circ$$

6. **55°**

$$\text{Complementary: sum to } 90^\circ. 90^\circ - 35^\circ = 55^\circ$$

7. **60°**

$$\text{Supplementary: sum to } 180^\circ. 180^\circ - 120^\circ = 60^\circ$$

8. **90°**

$$180^\circ - 30^\circ - 60^\circ = 90^\circ$$

9. **90°**

$$180^\circ - 45^\circ - 45^\circ = 90^\circ$$

10. **40°**

$$180^\circ - 90^\circ - 50^\circ = 40^\circ$$