Find the measure of the third angle of a triangle if the first two angles measure 120o and 20o.

**120 + 20 = 140**

**180 – 140 = 40o**
Find the measure of the third angle of a triangle if the first two angles measure 32o and 53o.

**32 + 53 = 85**

**180 – 85 = 95o**

Find the measure of the third angle of a triangle if the first two angles measure 47o and 32o.

**47 + 32 = 79**

**180 – 79 = 101o**

Find the measure of the third angle of a triangle if the first two angles measure 30o each.

**30 + 30 = 60**

**180 – 60 = 120o**

Find the measure of the third angle of a right triangle that has a 27o angle.

**90 + 27 = 117**

**180 – 117 = 63o**

If two angles in a triangle have a combined measure of 85o, then what is the measure of the third angle of the triangle?

**180 – 85 = 95o**

|  |  |
| --- | --- |
| Acute Triangle | All angles less than 90o. |
| Obtuse Triangle | One angle greater than 90o. |
| Right Triangle | One 90o angle. |
| Scalene Triangle | All angles/sides have a different measure. |
| Isosceles Triangle | Two angles/sides have the same measure. |
| Equilateral Triangle | All angles/sides have the same measure. |

If two angles of a triangle measure 43o and 48o, then what kind of triangle is it?

**43 + 48 = 91**

**180 – 91 = 89o**

**43o, 48o & 89o**

**Acute & Scalene**

If two angles of a triangle measure 45o and 90o, then what kind of triangle is it?

**45 + 90 = 135**

**180 – 135 = 45o**

**45o, 45o & 90o**

**Right & Isosceles**

In two angles of a triangle measure 41o and 98o. What kind of triangle is it?

**41 + 98 = 139**

**180 – 139 = 41o**

**41o, 41o & 98o**

**Obtuse & Isosceles**

If a right triangle has a 35o angle, what kind of triangle is it?

**90 + 35 = 125**

**180 – 125 = 55o**

**35o, 55o & 90o**

**Right & Scalene**

If a triangle has two angles that are 60o each, what kind of triangle is it?

**60 + 60 = 120**

**180 – 120 = 60**

**60o, 60o & 60o**

**Acute & Equilateral**

In ∆ ABC, $\overbar{AC}$ **⊥** $\overbar{CB}$ and m **∠** A = 20o. What is m **∠** B?

**20 + 90 = 110**

**180 – 110 = 70o**

In ∆ ABC, $\overbar{AC}$ **⊥** $\overbar{CB}$ and m **∠** B = 60o. What is m **∠** A?

**60 + 90 = 150**

**180 – 150 = 30o**

In ∆ ABC, $\overbar{AC}$ **⊥** $\overbar{CB}$ and m **∠** A = 50o. What is m **∠** B?

**50 + 90 = 140**

**180 – 140 = 40o**

In ∆ ABC, $\overbar{AC}$ **⊥** $\overbar{CB}$ and m **∠** B = 20o. What is m **∠** C?

**90o**

In ∆ ABC, $\overbar{AC}$ **⊥** $\overbar{CB}$ and m **∠** A = 55o. What is m **∠** B?

**55 + 90 = 145**

**180 – 145 = 35o**