

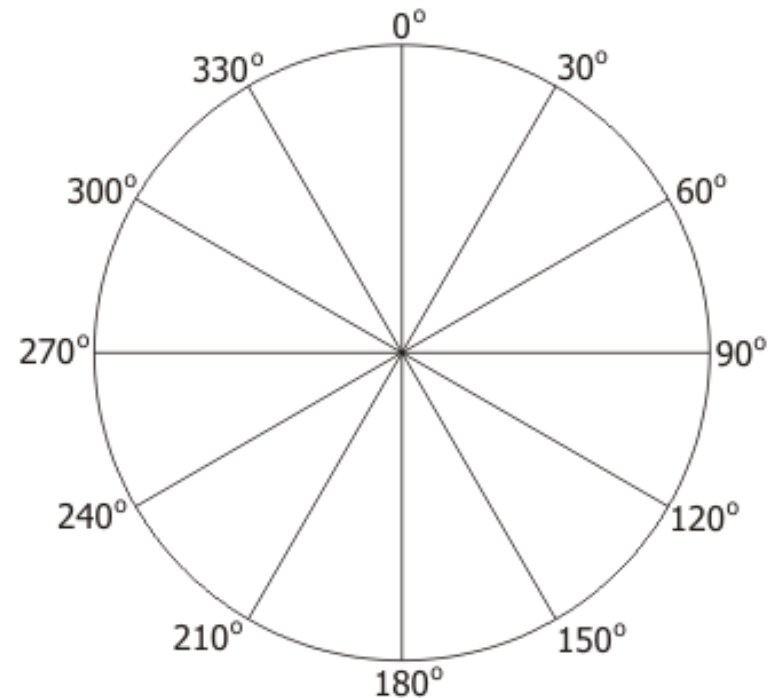
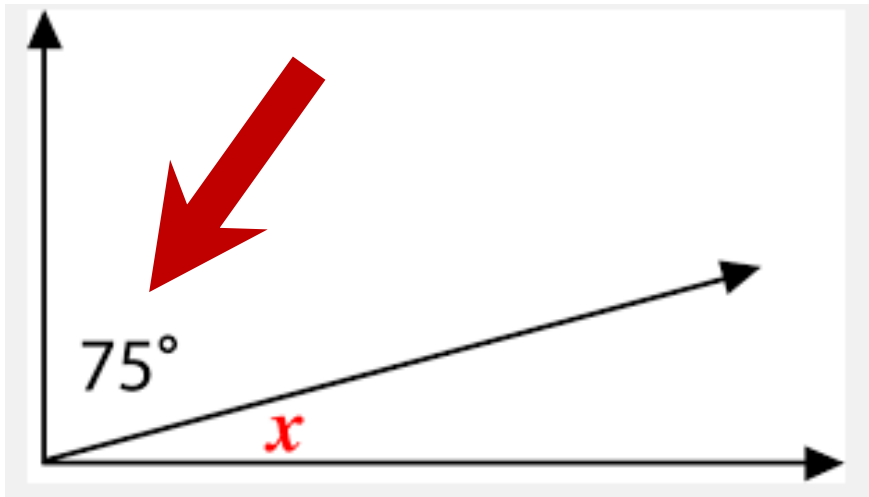
Grade 8  
Unit 6 Vocabulary

Pythagorean Theorem

(8.6C, 8.7C, 8.7D)

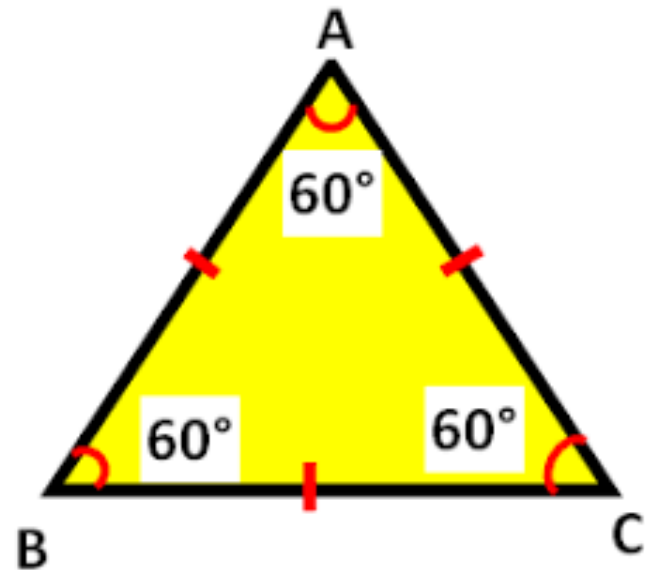
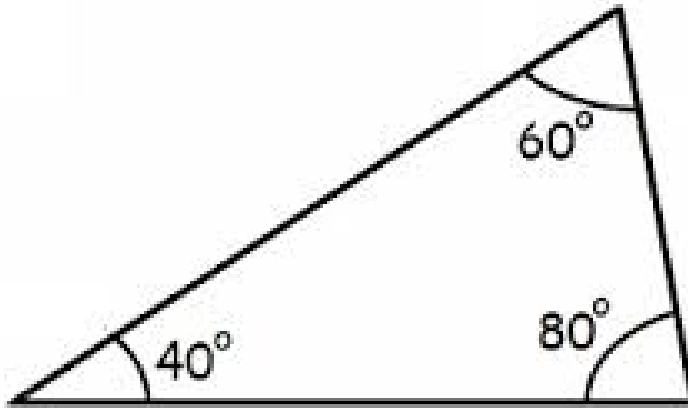
**Degree** – the measure of an angle where each degree represents  $1/360$  of a circle

## Units for measuring angles



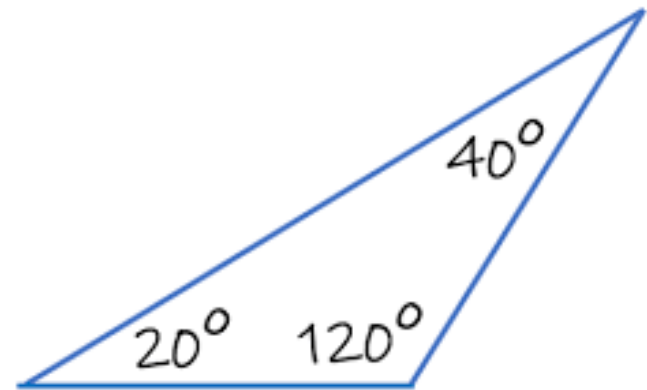
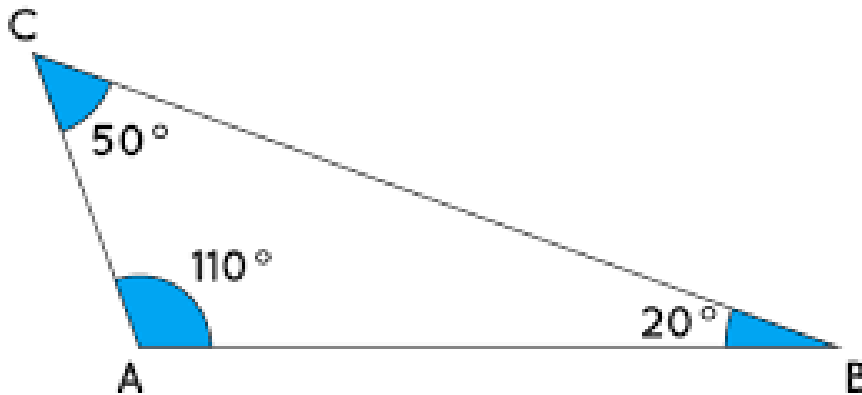
**Acute triangle** – a triangle that has all angles less than  $90^\circ$

A triangle with only acute angles.



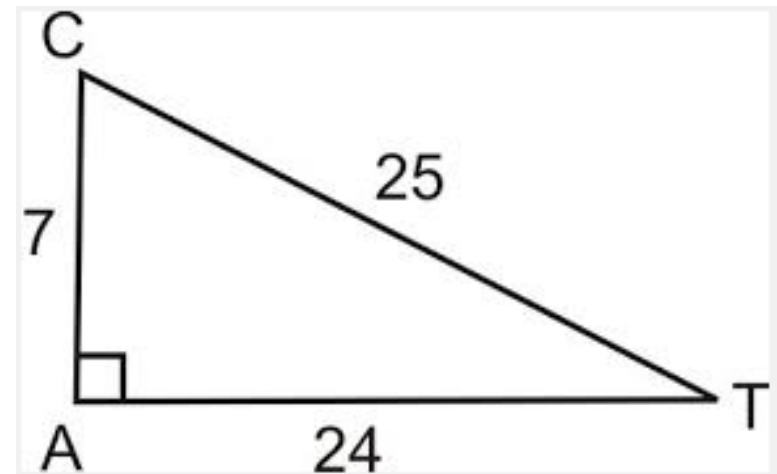
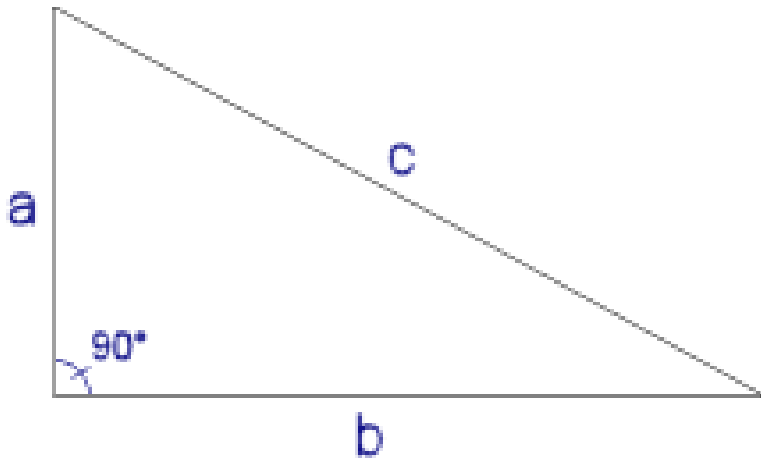
**Obtuse triangle** – a triangle that has an angle greater than  $90^\circ$

A triangle with one obtuse angle.



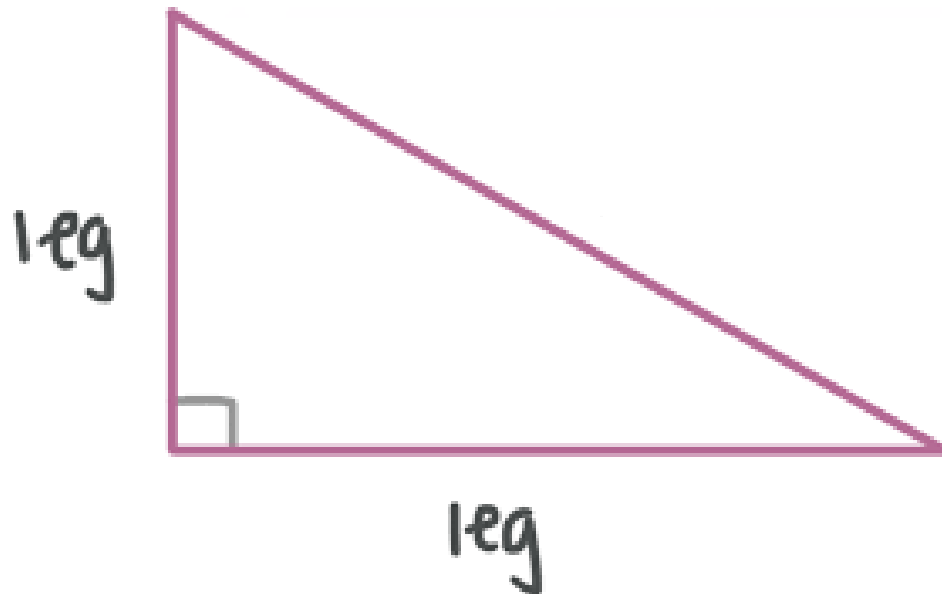
**Right triangle** – a triangle with one right angle (exactly 90 degrees) and two acute angles

A triangle with a 90 degree angle.



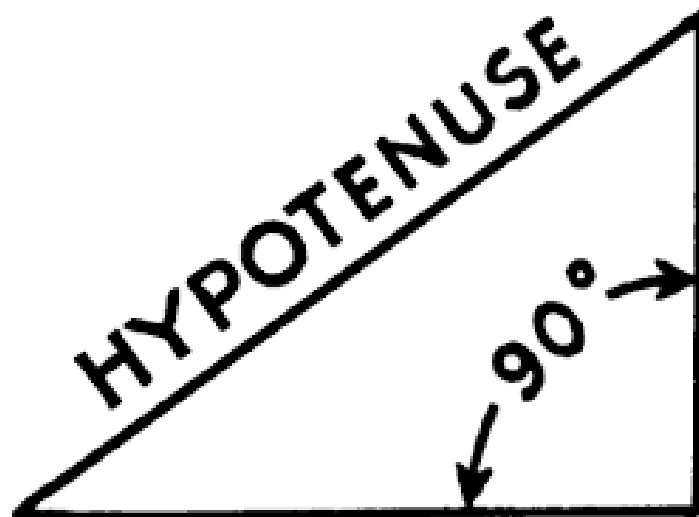
**Legs** – the two shortest sides of a right triangle. They form the right angle.

Two sides that make the right angle.



**Hypotenuse** – the longest side of a right triangle, the side opposite the right angle

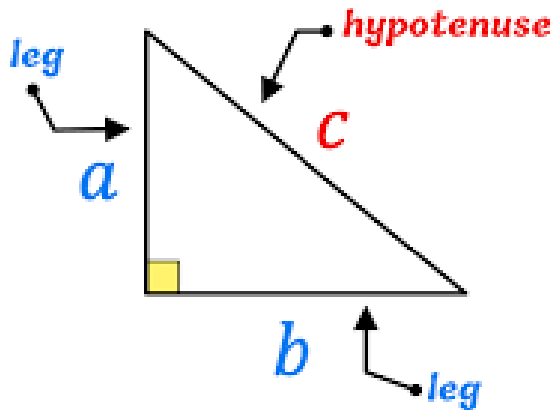
The side opposite the right angle.



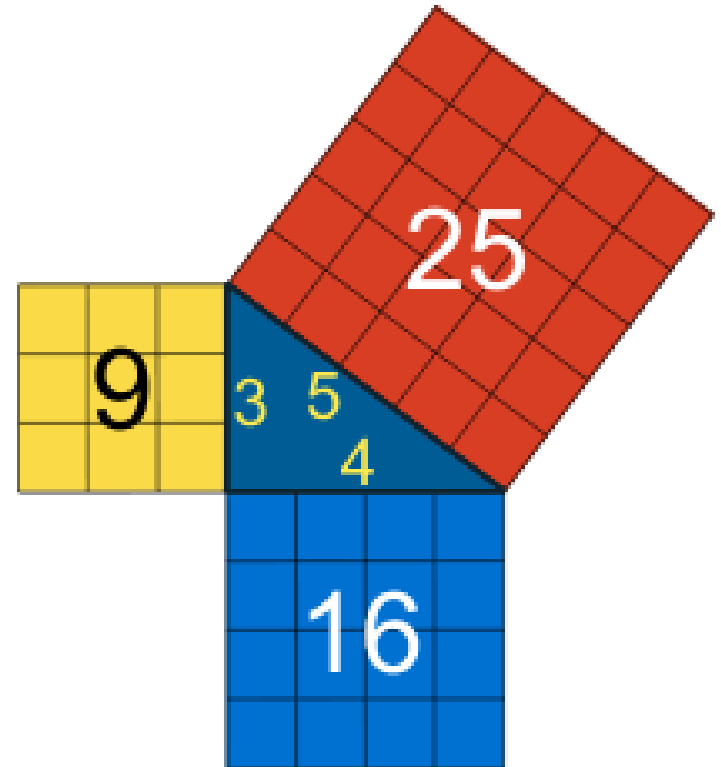
**Pythagorean Theorem** – in a right triangle, the sum of the squares of the lengths of the legs is equal to the square of the length of the hypotenuse; if  $a$  and  $b$  are legs and  $c$  is the hypotenuse.

$$a^2 + b^2 = c^2$$

### PYTHAGOREAN THEOREM



$$a^2 + b^2 = c^2$$





**Square root** – a factor of a number that, when squared, equals the original number

The opposite of a number squared.

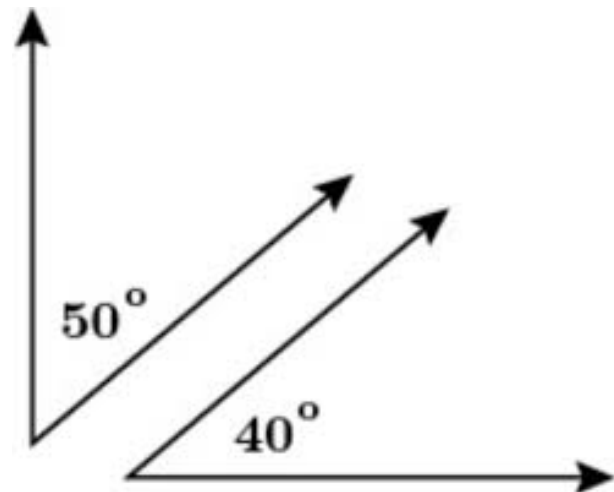
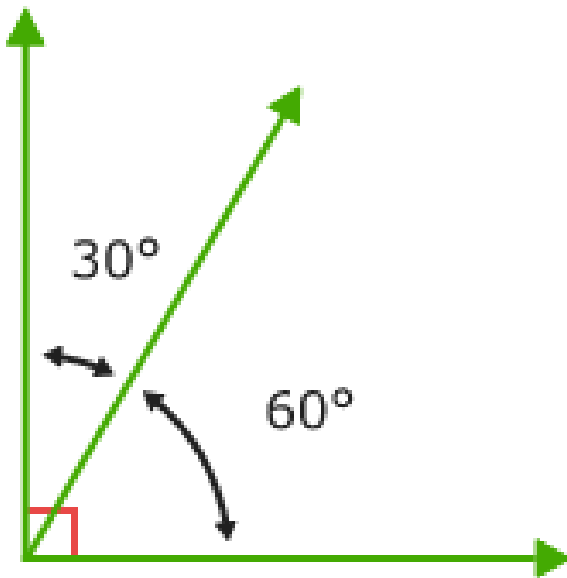
Symbol is the radical  $\sqrt{\quad}$



$$\begin{aligned}\sqrt{4} &= 2 \\ \sqrt{9} &= 3 \\ \sqrt{16} &= 4 \\ \sqrt{25} &= 5 \\ \sqrt{36} &= 6 \\ \sqrt{49} &= 7 \\ \sqrt{64} &= 8 \\ \sqrt{81} &= 9 \\ \sqrt{100} &= 10\end{aligned}$$

**Complementary angles** – two angles whose sum of angle measures equals 90 degrees

Two angles that add up to 90 degrees.



**Supplementary angles** – two angles whose sum of angle measures equals 180 degrees

Two angles that add up to 180 degrees.

