

Name _____

Date _____

Lesson 8: Triangles

Classifying Triangles

Video Help: <https://www.youtube.com/watch?v=tko52HVJsbo>

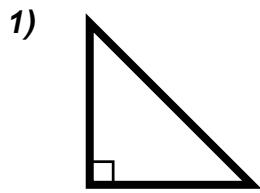
Directions: Classify the following triangles in two ways...

1 – Based on the angles:

1 – Based on the angles:	Acute	Right	Obtuse
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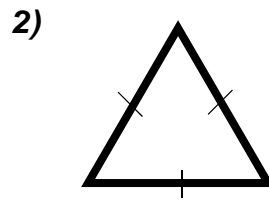
2 – Based on the sides

2 – Based on the sides:	Equilateral	Isosceles	Scalene
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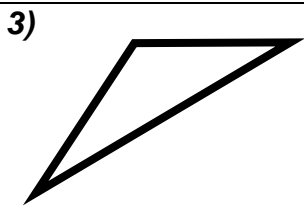
1 - _____

2 - _____



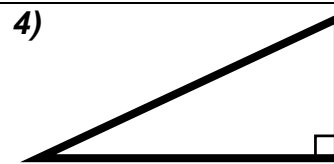
1 - _____

2 - _____



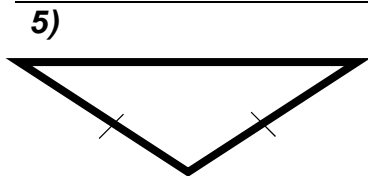
1 - _____

2 - _____



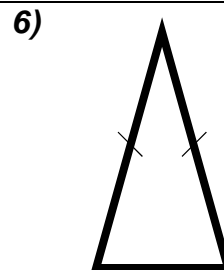
1 - _____

2 - _____



1 - _____

2 - _____

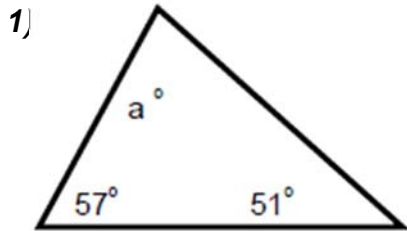


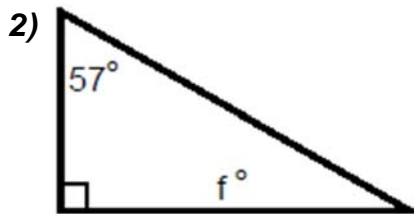
1 - _____

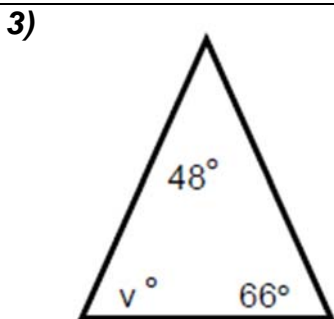
2 - _____

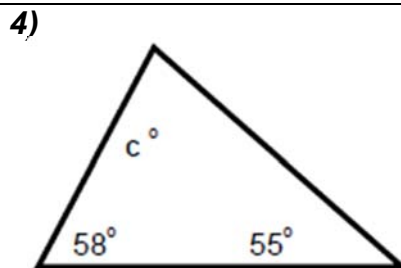
Interior angles of a triangle Video Help: <https://learnzillion.com/lessons/3599>

Directions: Find the measure of the missing angle in the triangle.





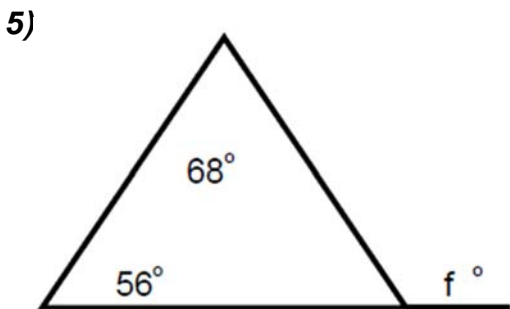


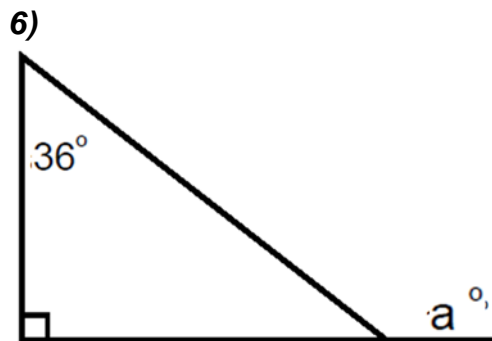


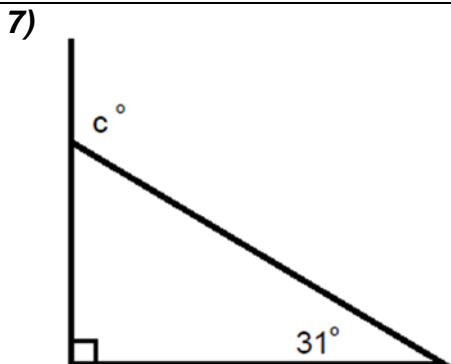
Exterior angles of a triangle

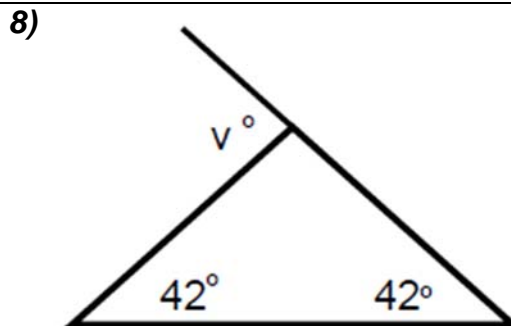
Video Help: <https://learnzillion.com/lessons/3600-understand-the-relationship-between-exterior-angles>

Directions: Find the measure of the exterior angle the triangle.







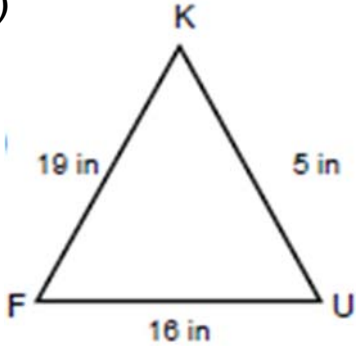


Comparing the sides and angles of a triangle

Video Help: <https://www.youtube.com/watch?v=oDZK--oK5Ss>

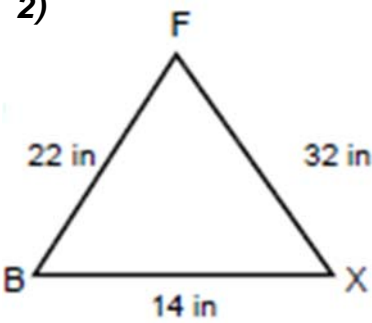
Directions: Name the largest angle and the smallest angle of the triangle.

1)



largest: _____
smallest: _____

2)



largest: _____
smallest: _____

3) For triangle ALR...

$LR = 6$ yds

$AL = 13$ yds

$RA = 12$ yds

largest: _____

smallest: _____

4) For triangle OIZ...

$OI = 22$ ft

$ZO = 19$ ft

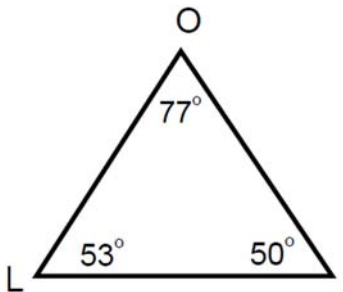
$IZ = 10$ ft

largest: _____

smallest: _____

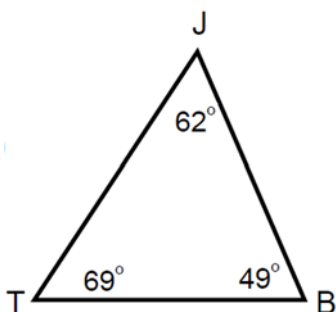
Directions: Name the largest side and the smallest side of the triangle.

5)



largest: _____
smallest: _____

6)



largest: _____
smallest: _____

7) For triangle SKQ...

$m\angle Q = 86^\circ$

$m\angle K = 51^\circ$

$m\angle S = 43^\circ$

largest: _____

smallest: _____

8) For triangle JIG...

$m\angle J = 46^\circ$

$m\angle G = 70^\circ$

$m\angle I = 64^\circ$

largest: _____

smallest: _____

Pythagorean Theorem

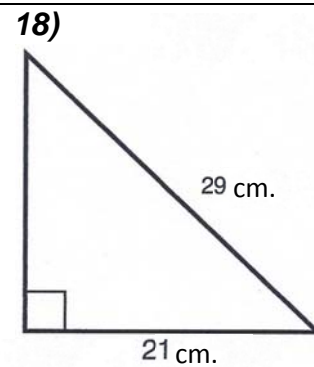
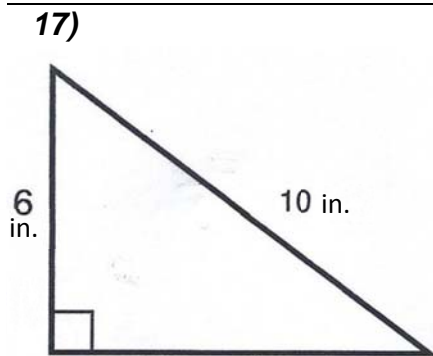
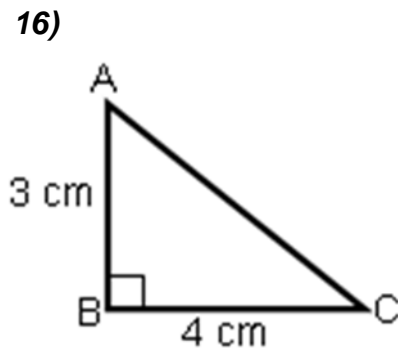
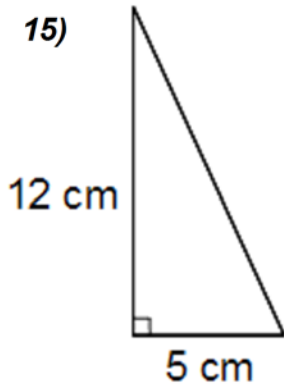
Video Help 1: <https://learnzillion.com/lessons/1286>

Video Help 2: <https://learnzillion.com/lessons/1260-use-the-pythagorean-theorem-to-see-if-a-triangle-is-a-right-triangle>

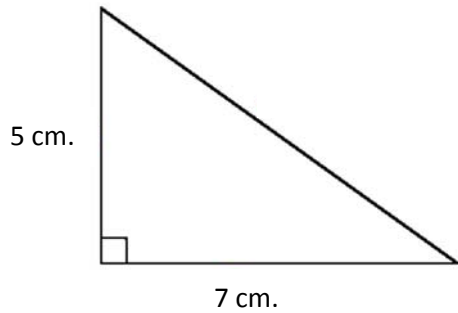
Video Help 3: <https://learnzillion.com/lessons/1262-find-the-length-of-the-hypotenuse-of-a-right-triangle-using-the-pythagorean-theorem>

Video Help 4: <https://learnzillion.com/lessons/1265-find-the-length-of-a-leg-of-a-right-triangle>

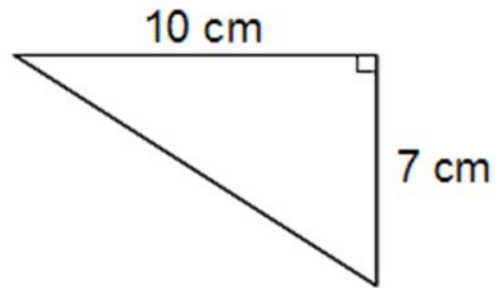
Directions: Use the Pythagorean Theorem to determine the missing side of the triangle.



19) (round your answer to the nearest tenth)



20) (round your answer to the nearest tenth)



21) Lauren leaves home to go to office. She drives 6 miles north and the she heads 8 miles east. How far is Lauren from her home?

22) A window pane is 12 inches by 9 inches. What is the distance between opposite corners of the windowpane?

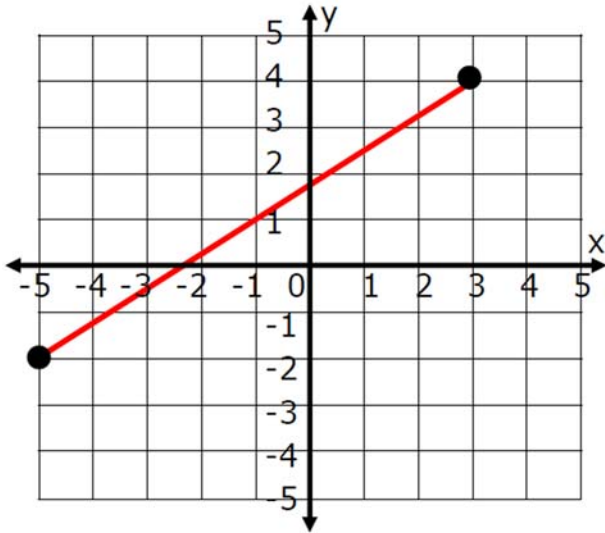
23) A triangle has sides with lengths of 11 cm, 13 cm and 15 cm. Is it a right triangle?

Distance

Video Help: <https://learnzillion.com/lessons/3406-find-distance-between-two-points-on-the-coordinate-plane-using-the-pythagorean-theorem>

Directions: Use the Pythagorean Theorem to find the distance between the two points on the grid.

24) Find the distance between $(3, -4)$ and $(-5, -2)$.



25) Find the distance between $(-3, 4)$ and $(3, -1)$. Round your answer to the nearest tenth.

