You need out your Warm Up & Agenda

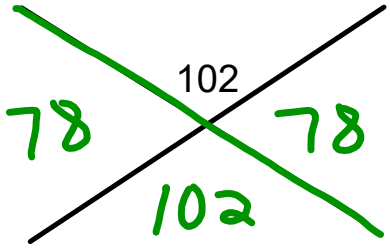
Homework: Triangles

Warm Up:

1) Fill in the remaining angles:

$x + 102 = 180$

$180 - 102 = 78$



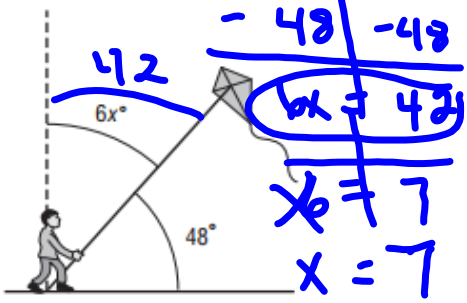
2) Find the missing angle:

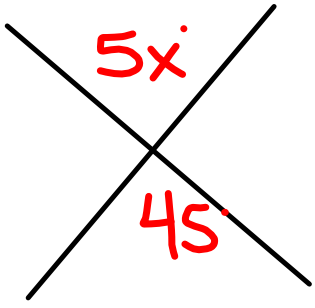
$6x + 48 = 90$

$-48 \quad -48$

$6x = 42$

$x = 7$

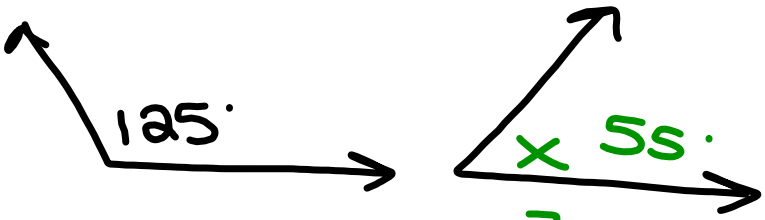




$5x = 45$

$x = 9$

Supp. $= 180^\circ$



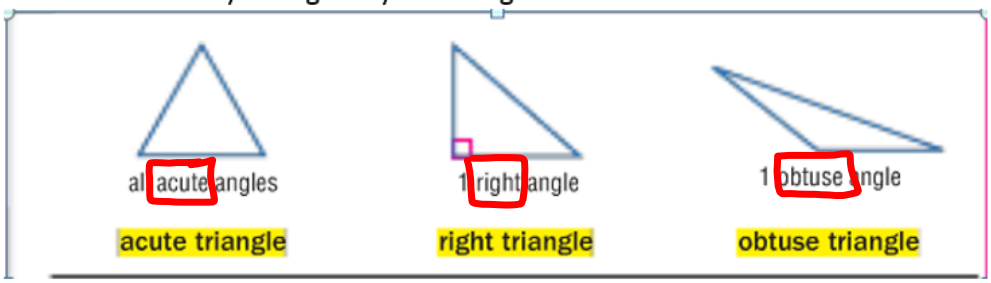
$125 + x = 180$

$-125 \quad -125$

$x = 55$

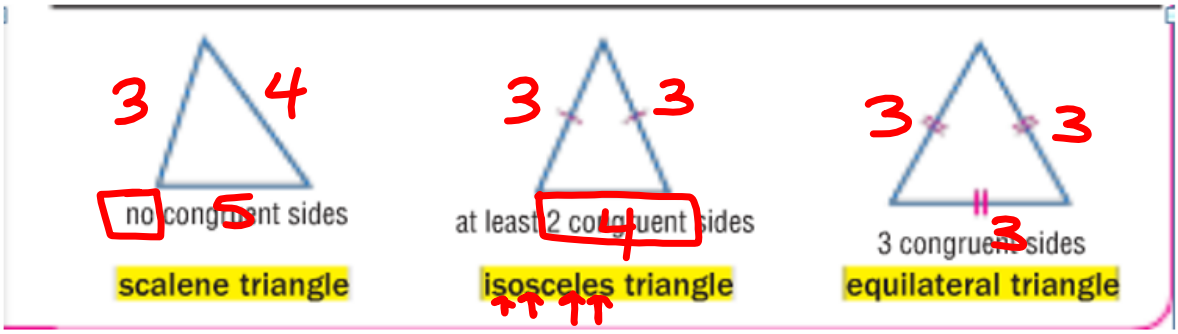
Classifying Triangles- Notes

You can classify triangles by their angle **measures**:



acute triangle **right triangle** **obtuse triangle**

You can classify triangles by their **sides**:



You try!

Classify this triangle by angle measure: Right

Classify this triangle by sides: Scalene

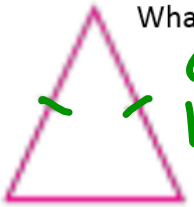
What kind of triangle is this?

acute
equilateral

What kind of triangle is this?

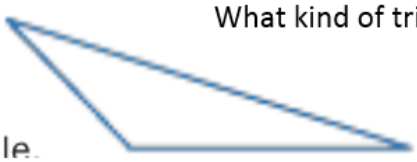
Right
Scalene

What kind of triangle is this?

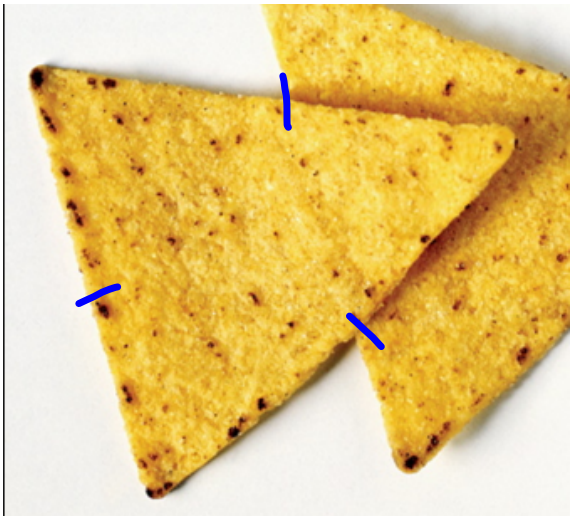


acute
isosceles

What kind of triangle is this?



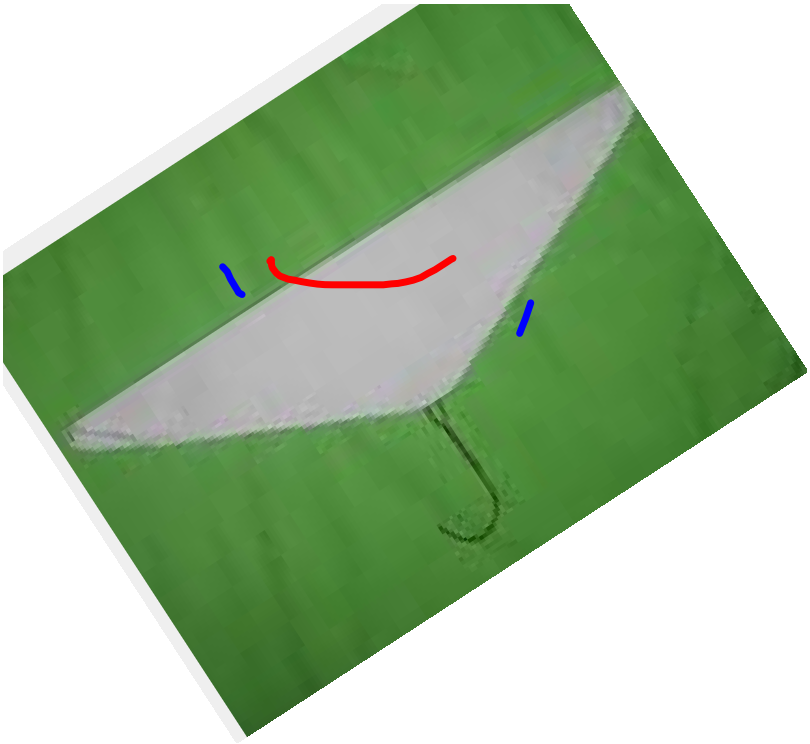
Obtuse
Scalene



e, A

I, A

R. S

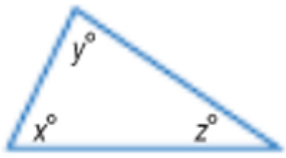


I, O

Angles of a Triangle- Notes

Words The sum of the measures of the angles of a triangle is 180°.

Model



Algebra $x + y + z = 180$

Every triangles angles should all add to be 180°!

Angles of a Triangle

Words The sum of the measures of the angles of a triangle is 180°.

Algebra $x + y + z = 180$

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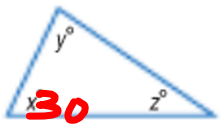
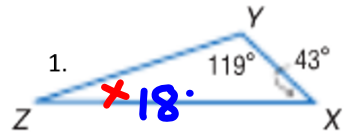


Every triangles angles should all add to be 180 !

Remember m< = measure of angle

m<x

1. 

Find the $m\angle Z$

$x + 119 + 43 = 180$

$x + 162 = 180$

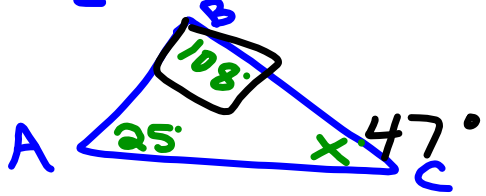
$-162 \quad -162$

$x = 18°$

Can you classify this triangle?

Obtuse
Scalene

2. In △ABC, $m\angle A = 25$, $m\angle B = 108$, Find $m\angle C$



Can you classify this triangle?

obtuse
Scalene

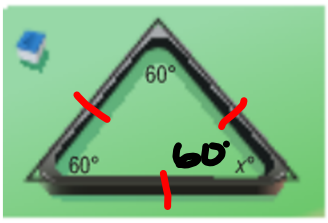
$x + 108 + 25 = 180$

$-25 \quad -25$

$x + 108 = 155$

$-108 \quad -108$

$x = 47°$

3. 

Find x:

Can you classify this triangle?

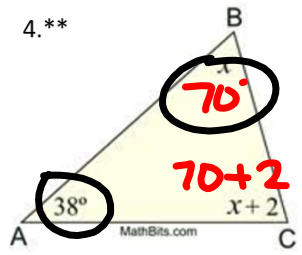
Acute equilateral

$x + 60 + 60 = 180$

$x + 120 = 180$

$-120 \quad -120$

4.**



Find the missing angles:

$x = 70$

$70 + 2 = 72°$

Can you classify this triangle?

Scalene
acute

$x + x + 2 + 38 = 180$

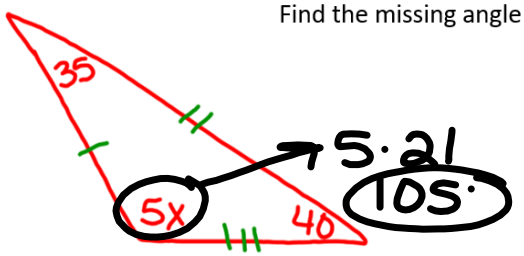
$2x + 40 = 180$

$-40 \quad -40$

$\frac{2x}{2} = \frac{140}{2}$

$x = 70$

5. Find the missing angle



5x + 40 + 35 = 180

5x + 75 = 180

−75 −75

5x = 105

5x/5 = 105/5

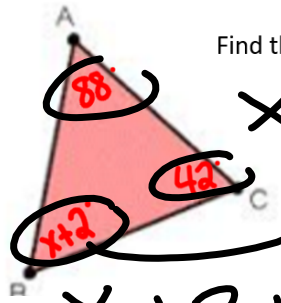
x = 21

Can you classify this triangle?

Scalene

Obtuse

6. Find the missing angle



$x+2+42$

$x+2=50$

$x+2+42+88=180$

$x+132=180$

$x-132=-132$

$x=48$

Can you classify the triangle?

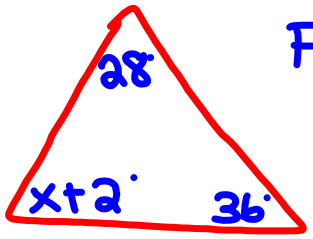
$x=48$ Scalene

acute

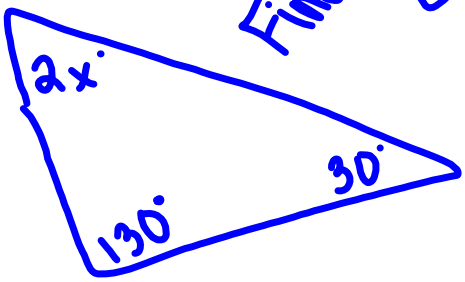
Homework!

Find missing ∠

1

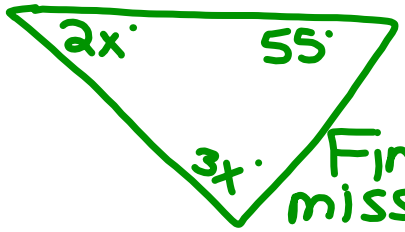


2

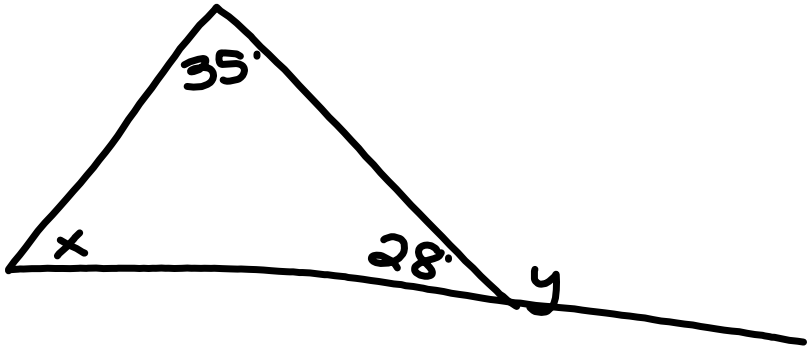


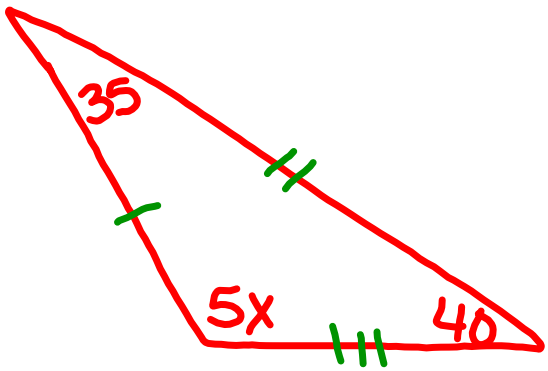
Find missing ∠

3

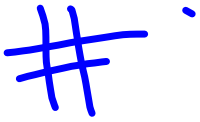


Find missing ∠s


35°
x
28°
y


35
5x
40

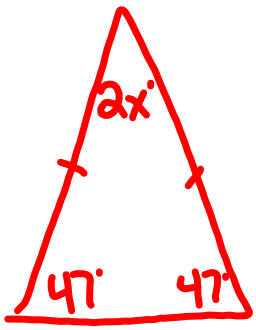
Sit silently for the news



Today: Practice

Come up and get every 2 problems checked

11.



A
E

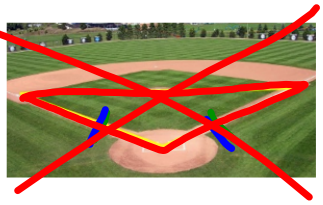
1. Classify this triangle

A
I

2. Classify this triangle

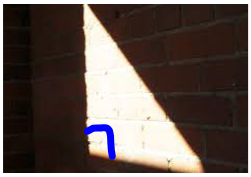
R
S

3. Classify this triangle



I
O

4. Classify this triangle



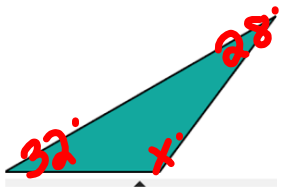
R
S

5. Classify this triangle

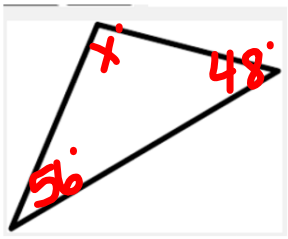
R
S

6. Classify this triangle

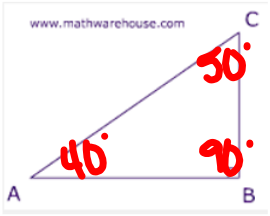
7.


83°
32°
x°

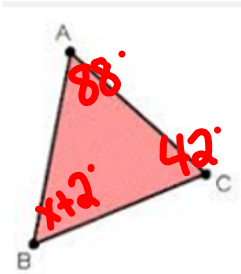
8.


x°
48°
56°

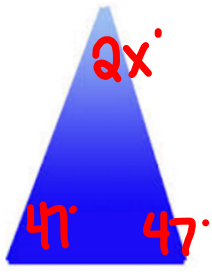
9.


www.mathwarehouse.com
C
50°
40°
90°
A
B

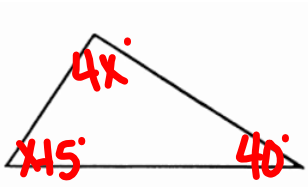
10.


A
88°
42°
x+2°
C
B

11.


2x°
47°
47°

12.


4x°
x+5°
40°