

APRIL 1, 2015

1ST
2ND

STARTER

When Hector, the new kid, asked Velda how old she was, she replied, "In two years, I'll be twice as old as I was five years ago."

How old is Velda now?



EASTERFUN

4/1 Triangles

New vocabulary word: **TRIANGLE**

3-side polygon

With your partner, name as many types of triangles as you can! Be prepared to describe them too.

Acute - all acute \angle s

Scalene - no sides the same

Equilateral - all sides the same

Isosceles - Two sides the same

Right - one right \angle

Obtuse - one obtuse \angle

Equiangular - all \angle 's the same

Classifying Triangles Using Angles

acute
triangle



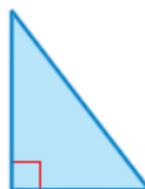
all acute angles

obtuse
triangle



1 obtuse angle

right
triangle



1 right angle

equiangular
triangle

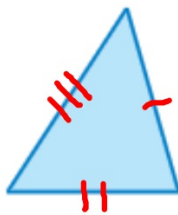


3 congruent angles

Classifying Triangles Using Sides

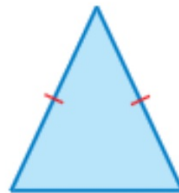
Congruent sides have the same length.

scalene triangle



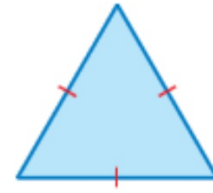
no congruent sides

isosceles triangle



at least 2 congruent sides

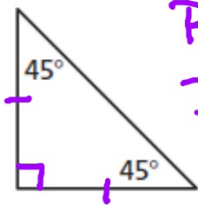
equilateral triangle



3 congruent sides

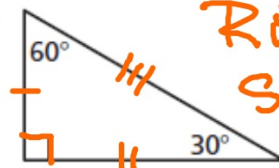
Classify the triangle.

1.

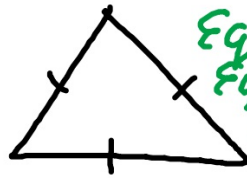


Right
Isos

2.

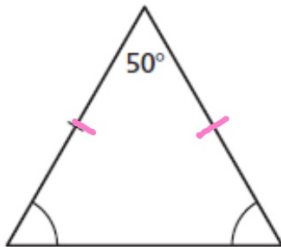


Right
Scalene



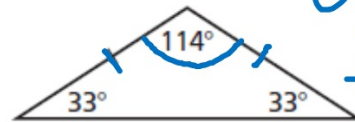
Equilateral
Equilateral
Acute
Isos

3.



Acute
Isos

4.



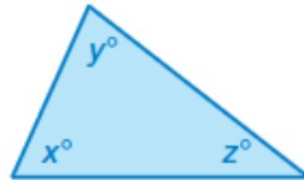
Obtuse
Isos

Key Idea

Sum of the Angle Measures of a Triangle

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

Algebra $x + y + z = 180$



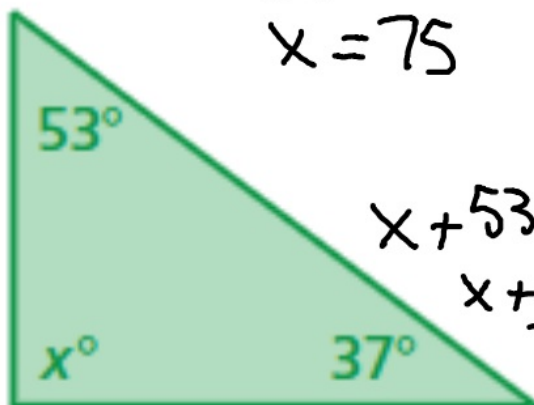
Find the value of x . Then classify the triangle.



$$x + 78 + 27 = 180$$

$$x + 105 = 180$$

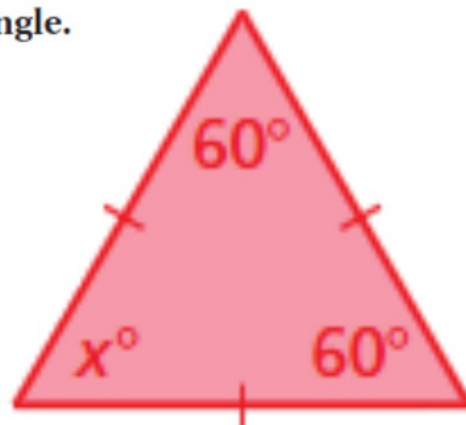
$$x = 75$$



$$x + 53 + 37 = 180$$

$$x + 90 = 180$$

$$x = 90$$



$$x = 60$$

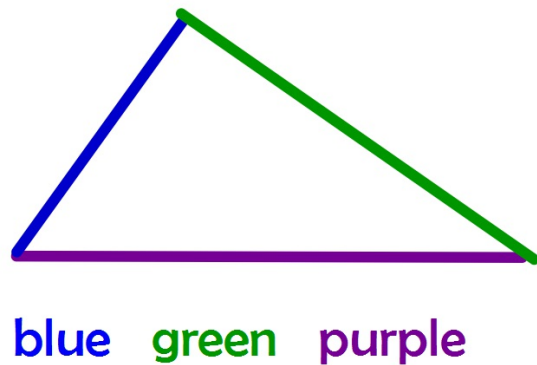
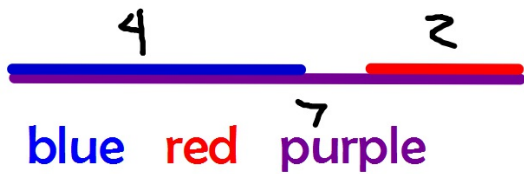
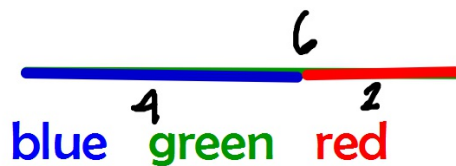
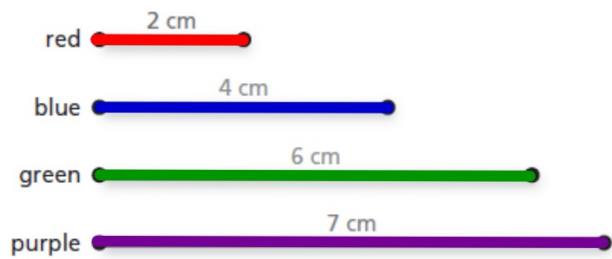
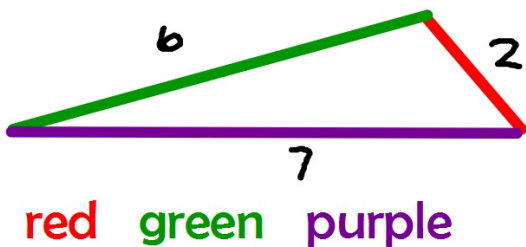
def of Equiang

$$x + 60 + 60 = 180$$

$$x + 120 = 180$$

$$x = 60$$

Can you create a triangle using the given combination of these colored segments?



Tell whether a triangle can have the given angle measures. If not, change the first angle measure so that the angle measures form a triangle.

$25^\circ, 64^\circ, 91^\circ$

$$\begin{array}{r} 25 \\ 64 \\ 91 \\ \hline 180 \end{array}$$

Yes

$85^\circ, 64^\circ, 30^\circ$
+1

$$\begin{array}{r} \cancel{85} \ 86 \\ 64 \\ 30 \\ \hline 179 \\ +1 \\ \hline 180 \end{array}$$

$33^\circ, 140^\circ, 12^\circ$

$$\begin{array}{r} \cancel{33} \ 28 \\ 140 \\ 12 \\ \hline 185 \\ -5 \\ \hline 180 \end{array}$$

HOMWORK

Pink WS3

DUE Friday