

Warm up

One half gallon (g) is the same as how many fluid ounces (fl oz)?

- A. 4 fl oz
- B. 16 fl oz
- C. 64 fl oz
- D. 124 fl oz

**VOLUME AND CAPACITY**

Customary

1 gallon (gal) = 4 quarts (qt)

1 quart (qt) = 2 pints (pt)

1 pint (pt) = 2 cups (c)

1 cup (c) = 8 fluid ounces (fl oz)

Triangles - Angles

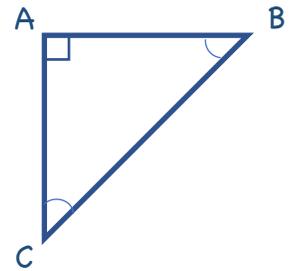
Triangles have three internal angles. Angles can be named for the point that makes their center or the three points that make them.

Ex: Triangle ABC is shown at right.

$\angle A$  can also be  $\angle BAC$  or  $\angle CAB$

$\angle B$  can also be \_\_\_\_\_ or \_\_\_\_\_

$\angle C$  can also be \_\_\_\_\_ or \_\_\_\_\_



Angles are measured in degrees (°).

A full turn (facing the way you started again) is 360°

A half turn is \_\_\_\_\_.

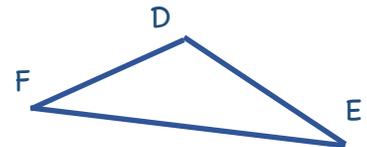
A quarter turn is \_\_\_\_\_.

Angles may be given other names based on their angle.

Angles smaller than 90° are called \_\_\_\_\_ ( $\angle F$ ).

90° angles ( $\angle A$ ) are called \_\_\_\_\_ angles.

Angles larger than 90° are called \_\_\_\_\_ ( $\angle D$ ).



When two angles are the same they are called \_\_\_\_\_.

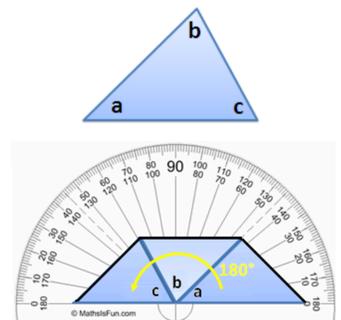
(90°, 180°, ABC, ACB, Acute, BCA, CBA, Congruent, Obtuse, Right)

Triangle Postulate

Stack three sheets of paper together. Cut out any triangle from this stack. You should now have three identical (congruent) triangles.

Use a protractor to measure the angles of your triangles. Label the smallest angle "A", the largest angle "B", and the remaining angle "C"

Put all three triangles together so that  $\angle A$ , is next to  $\angle B$  is next to  $\angle C$ . What angle do angles A, B, and C make when added together?



## ANGLE RELATIONSHIPS & TRIANGLES

Answer each of the questions below. Be sure to show your thinking.

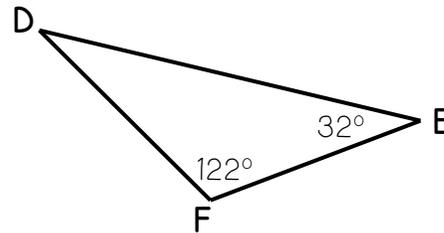
1. Which set of angle measures CANNOT be the angle measures of a triangle?

- A.  $65^\circ, 65^\circ, 50^\circ$
- B.  $54.3^\circ, 47.5^\circ, 78.2^\circ$
- C.  $22.5^\circ, 36.4^\circ, 110.1^\circ$
- D.  $40^\circ, 40^\circ, 100^\circ$

2. In triangle QRS, the measure of angle RSQ is  $29.1^\circ$ , and the measure of angle QRS is  $80^\circ$ . What is the measure of angle SQR?

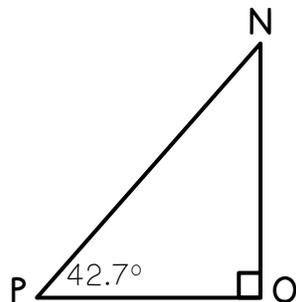
- A.  $109.1^\circ$
- B.  $71.1^\circ$
- C.  $150.9^\circ$
- D.  $70.9^\circ$

3. Triangle DEF is shown below. What is the measure of  $\angle D$ ?



4. Triangle NOP is shown below. What is the measure of  $\angle N$ ?

- A.  $47.3^\circ$
- B.  $137.3^\circ$
- C.  $48.8^\circ$
- D.  $132.8^\circ$



5. In triangle EFG, the measure of angle E is  $97^\circ$ , and the measure of angle F is  $15^\circ$ . What is the measure of angle G?

6. Anna solved three problems on her math test. One of them was incorrect. Circle the problem that was solved incorrectly and find the correct answer.

Triangle ABC with angles  $74.1^\circ$  at B,  $83.2^\circ$  at A, and  $x^\circ$  at C.

$$83.2 + 74.1 + x = 180$$

$$157.3 + x = 180$$

$$x = 22.7^\circ$$

Triangle XYZ with angles  $42^\circ$  at W,  $36.08^\circ$  at Y, and  $x^\circ$  at X.

$$42 + 36.08 + x = 180$$

$$78.08 + x = 180$$

$$x = 101.92^\circ$$

Triangle MNL with angles  $x^\circ$  at M,  $32^\circ$  at N, and  $108^\circ$  at L.

$$32 + x = 108$$

$$x = 76^\circ$$

