

Starter

The following pre-image, a trapezoid with vertices

T(-3, 2), R(-2, 4), A(3, 4), P(3, 2)

is dilated (from the origin) by a scale factor of  $k = 3$ .

What are the coordinates of the image?

4 pts

answers



If the formula for the area of a trapezoid is:  $A = \frac{1}{2}h(b_1 + b_2)$

1 pt

Find the area of the pre-image:



Dec 7-4:39 PM

## homework correction

pg. 203- 204 in Workbook

Completion

10 problems: 5 points

8-9 problems: 4 points

6-7 problems: 3 points

4-5 problems: 2 points

2-3 problems: 1 point

0-1 problems: 0 points

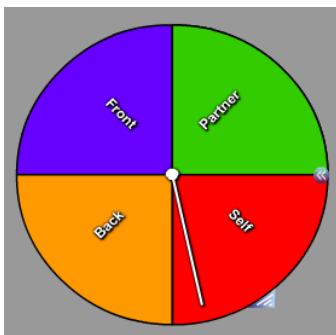
1) 141.4 ft<sup>3</sup>

5) 251.3 m<sup>3</sup>

3) 785.4 in<sup>3</sup>

7) 523.6 mm<sup>3</sup>

9) 371.6 in<sup>3</sup>



Dec 7-5:03 PM

## 8th Grade Math

Unit 4  
Day 8

I can ...

Measure and classify an angle as either acute, right, obtuse.

Determine whether two angles are complementary, supplementary, or neither.

Dec 7-5:17 PM

## Measuring Angles

## Vocabulary

**Ray:** A line with a starting point that travels in one direction

**Angle:** Two rays that share a common end point

**Vertex:** The endpoint shared by two sides

**Degree:** A measurement for angles

**Right Angle:** An angle that measures  $90^\circ$

**Acute Angle:** An angle that measures less than  $90^\circ$

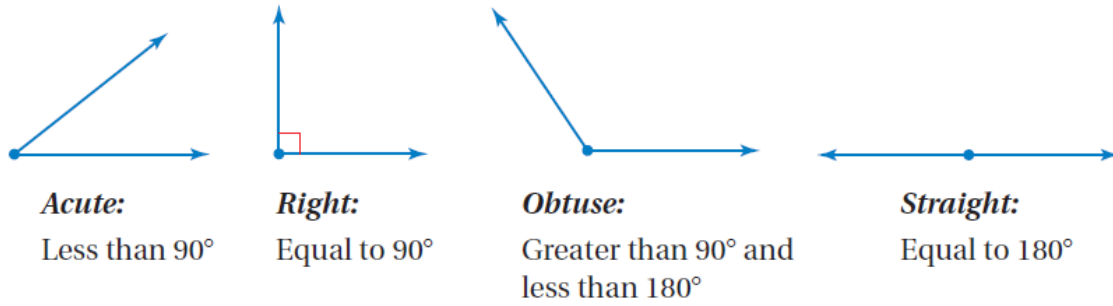
**Obtuse Angle:** An angle that measures more than  $90^\circ$  but less than  $180^\circ$

**Straight Angle:** An angle that measures  $180^\circ$



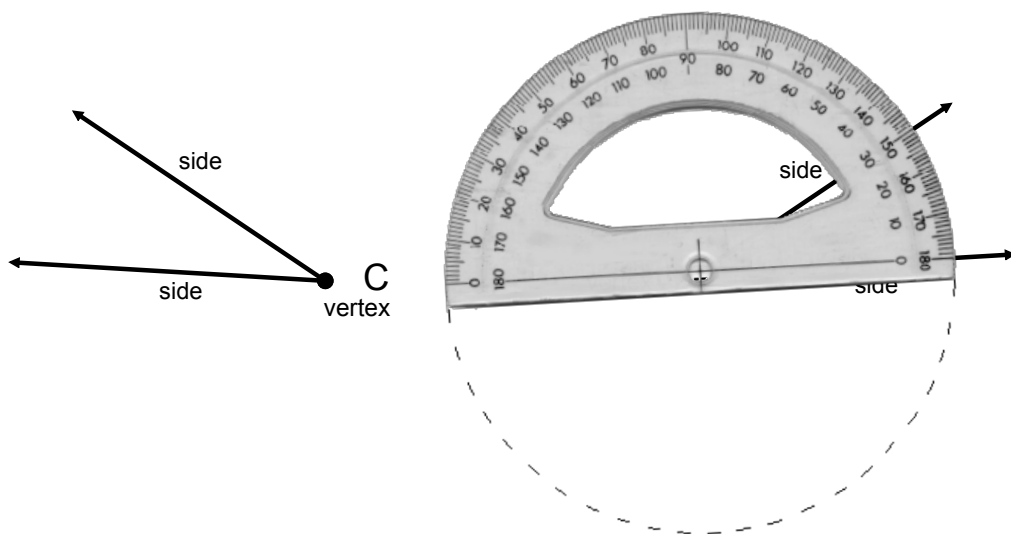
Apr 1-7:08 PM

*Classification of Angles*



Jan 19-8:04 AM

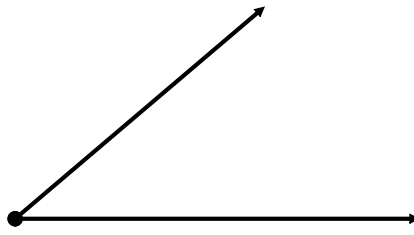
To measure an angle you use degrees. Remember that a circle has  $360^\circ$ . A tool used to measure the degrees in an angle is called a protractor. Always start measuring from zero.



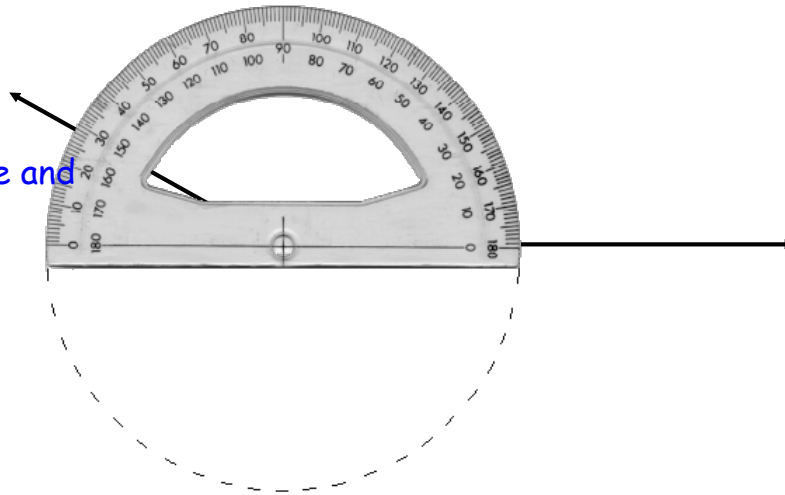
Apr 1-7:08 PM

### You Try

Measure and Classify

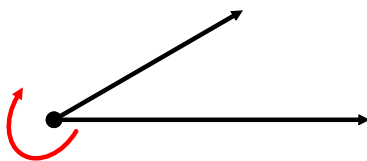


Measure and Classify

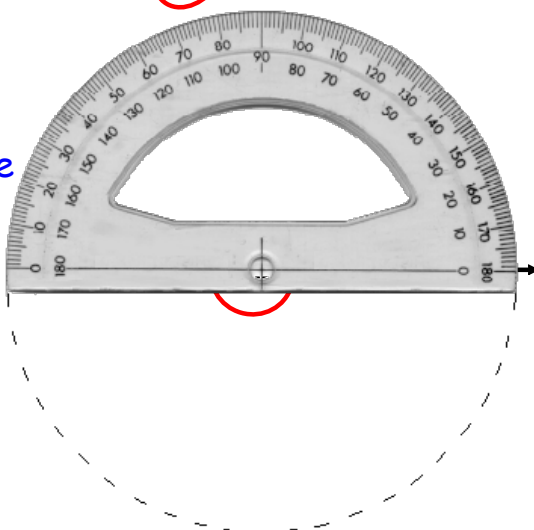


Apr 1-7:37 PM

Measure



Measure



$$\begin{array}{r} 360 \\ - 160 \\ \hline 200^\circ \end{array}$$

Jan 19-8:29 AM

# 5-1 B

## Vocabulary

## Angle Relationships

**Vertical Angles:** Opposite angles formed by intersecting lines

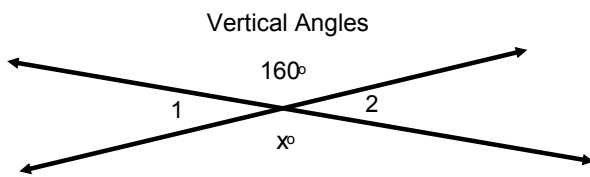
**Congruent:** Same measure, size, and shape  $\cong$

**Congruent Angles:** Angles with the same measure  $m \angle 1 \cong m \angle 2$

**Supplementary Angles:** Two angles that add up to  $180^\circ$

**Complementary Angles:** Two angles that add up to  $90^\circ$

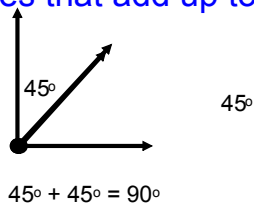
**adjacent angle:** angles that share a side



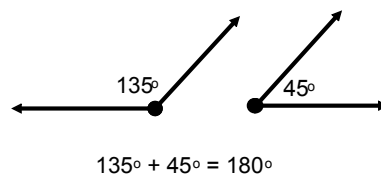
Vertical angles are always congruent!

Apr 1-9:05 PM

**Complementary Angles:** Two angles that add up to  $90^\circ$

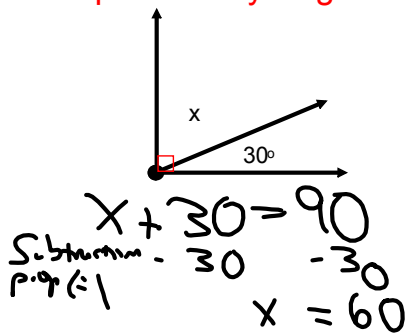


**Supplementary Angles:** Two angles that add up to  $180^\circ$

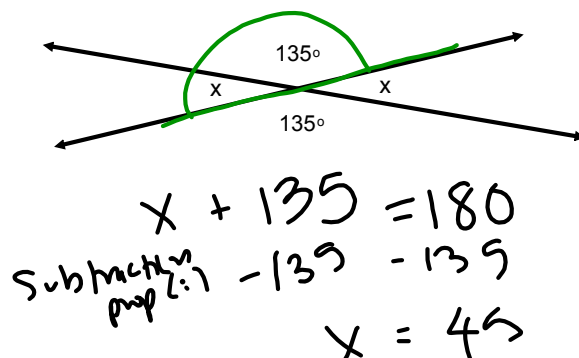


Find the value of x.

**Complementary Angles**

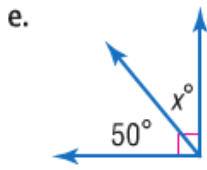


**Supplementary Angles**

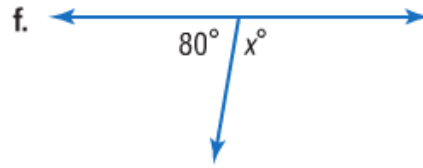


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Find the value of x.



complementary

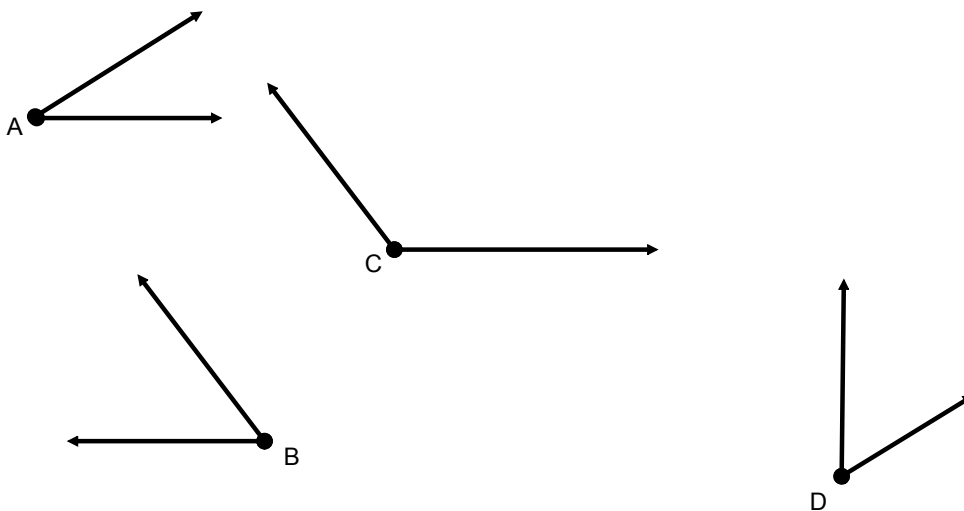


supplementary

$$\begin{aligned}
 180 &= x + 80 \\
 -80 &\quad -80 \\
 100 &= x
 \end{aligned}$$

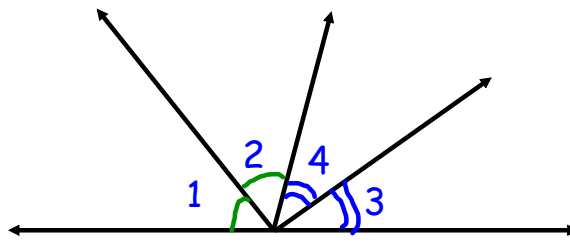
Apr 1-9:17 PM

Move the angles to make a complementary and supplementary pair.



Apr 27-7:23 AM

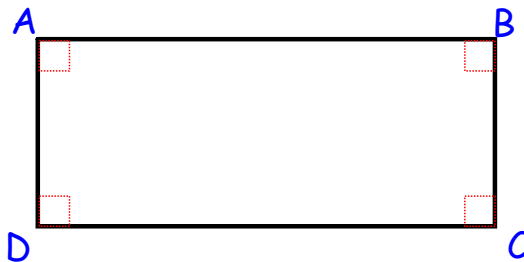
If  $m\angle 1 = m\angle 2$  and  $m\angle 3 = m\angle 4$  what can you conclude about the sum of  $m\angle 1 + m\angle 3$ ?



$$\begin{aligned} 2x + 2y &= 180 \\ \frac{2x + 2y}{2} &= \frac{180}{2} \\ x + y &= 90 \end{aligned}$$

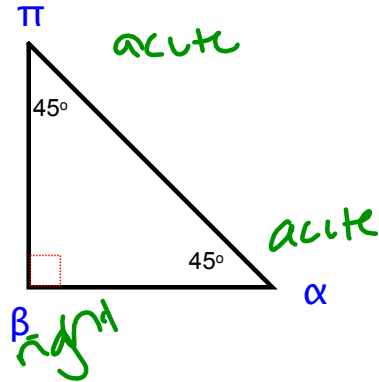
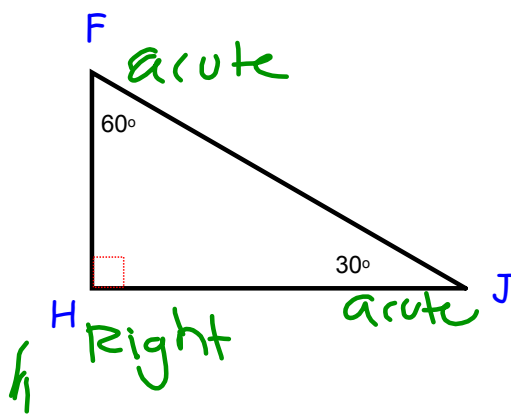
Apr 27-7:11 AM

Name and classify the angles of the rectangle.



Apr 27-7:16 AM

Name and classify the angles of the triangles.



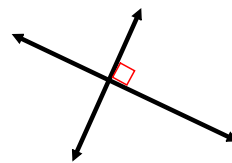
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## Angle Relationships

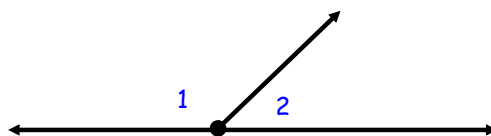
**Perpendicular lines:** Special intersecting lines that form right angles.



$m \perp n$



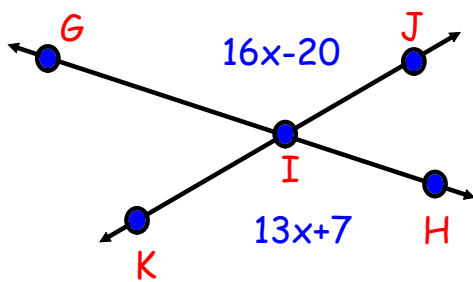
**Linear Pair:** Adjacent angles whose non common sides are opposite rays.



Sep 1-1:39 PM



## Vertical Angles are Congruent



Find the value of  $x$  by setting up an equation.

$$\begin{array}{r}
 16x - 20 = 13x + 7 \\
 -13x \quad \quad -13x \text{ Subtraction} \\
 \hline
 3x - 20 = 7 \quad \text{Add. Prop.} \\
 +20 \quad +20 \quad (=) \\
 \hline
 3x = 27 \quad \text{D.v. Prop.} \\
 \frac{3x}{3} = \frac{27}{3} \quad \boxed{x=9}
 \end{array}$$

Sep 1-4:26 PM

## homework assignment

KUTA - Classifying angles

KUTA - Angle relationships

Dec 9-10:02 PM

Dec 7-5:28 PM

Dec 7-5:34 PM