

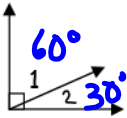
Math 7
Unit 8 - Day 101

Name: _____

Types of Angles

Complimentary Angles: Two Angles that have a sum of 90° .

The complement of each angle is:



a) 36° 54°

a) 81° 9°

a) $25\frac{1}{4}^\circ$ $64\frac{3}{4}^\circ$

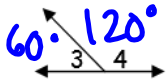
a) 42.5° 47.5°

$$\begin{array}{r} 90 \\ 89\frac{1}{4} \\ -25\frac{1}{4} \\ \hline 64\frac{3}{4} \end{array}$$

$$\begin{array}{r} 90.0 \\ -42.5 \\ \hline 47.5 \end{array}$$

Supplementary Angles: Two angles that have a sum of 180° .

The supplement of each angle is:



a) 65° 115°

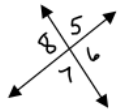
a) 104° 76°

a) $96\frac{1}{2}^\circ$ $83\frac{1}{2}^\circ$

a) 138° 42°

$$\begin{array}{r} 180 \\ -65 \\ \hline 115 \end{array}$$

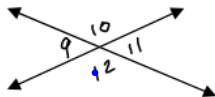
Adjacent Angles: Two angles with a common vertex and a common side. Their interiors do not intersect (overlap).



Name the adjacent angles: $\angle 7$ and $\angle 8$

$\angle 5$ and $\angle 8$
 $\angle 5$ and $\angle 6$

Vertical Angles: Two angles that are formed by intersecting lines. They are opposite and equal in measure. They share a common vertex but not a common side.

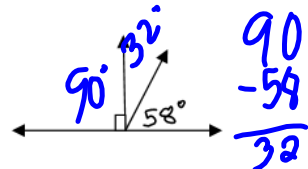
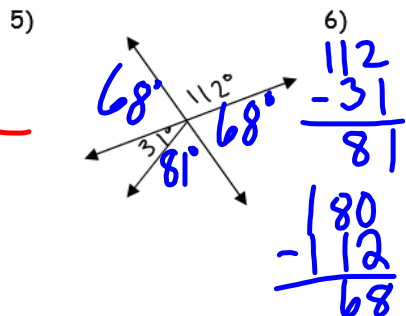
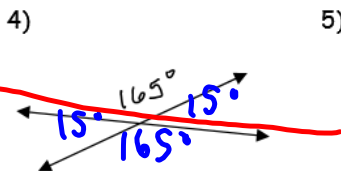
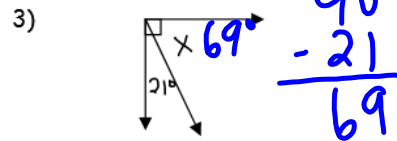
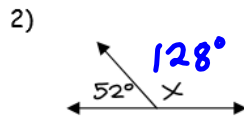
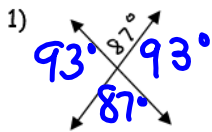


Name the vertical angles: $\angle 10$ and $\angle 12$

$\angle 9$ and $\angle 11$

Find the missing angle:

$$\begin{array}{r} 180 \\ -87 \\ \hline 93 \end{array}$$



Refer to the diagram at the right. Identify each pair of angles as adjacent, vertical or neither.

7) $\angle 7$ and $\angle 12$ adj.

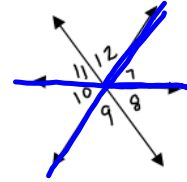
8) $\angle 9$ and $\angle 11$ neither

9) $\angle 8$ and $\angle 9$ adj.

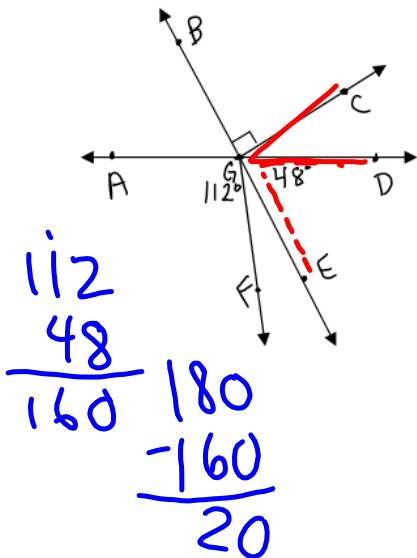
10) $\angle 8$ and $\angle 11$ Vertical

11) $\angle 7$ and $\angle 10$ Vertical

12) $\angle 10$ and $\angle 12$ neither



Use the diagram to answer the following questions:



13) $m\angle FGE =$ 20°

14) $m\angle AGB =$ 48°

15) Name an angle adjacent to $\angle BGC$ $\angle AGB$

16) Name an angle adjacent to $\angle EGF$ $\angle EGD$

17) Name an angle supplementary to $\angle BGD$ $\angle AGD$

18) Name an angle complementary to $\angle DGC$ $\angle DGE$