

Your Math Story

Write a paragraph about your first memory of mathematics as well as your best and not-so-best interaction with math.

Warm Up

Solve for x.

$$1. \quad 8x - 8 - 6x = 20 \quad (X = 14)$$

$$\begin{array}{r} 2x - 8 = 20 \\ + 8 \quad + 8 \\ \hline 2x = 28 \\ \frac{2x}{2} = \frac{28}{2} \end{array}$$

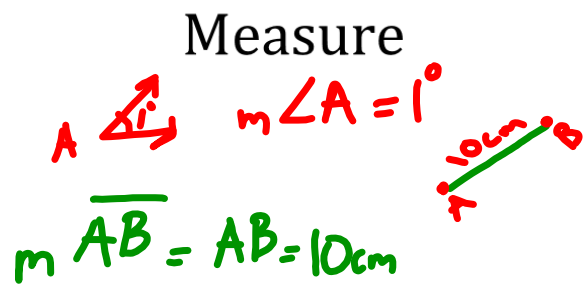
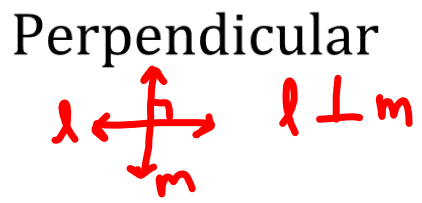
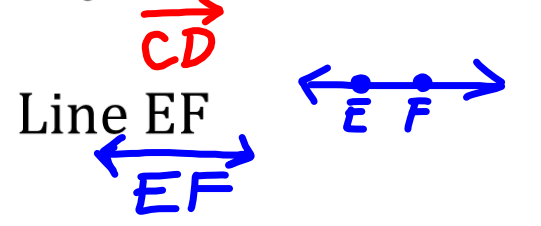
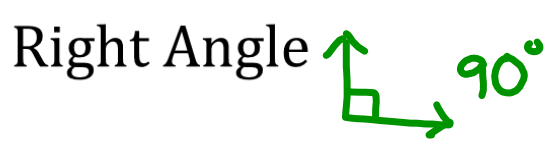
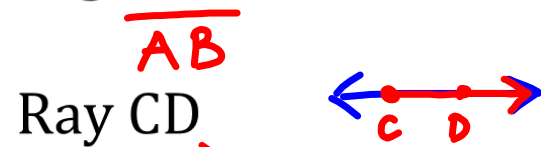
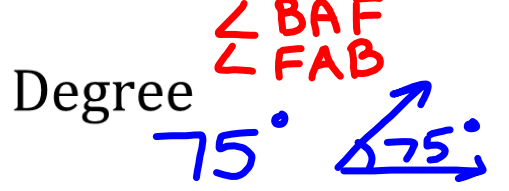
$$2. \quad \frac{2}{3}x + 2 = 8 \quad (X = 9)$$

$$\begin{array}{r} \frac{2}{3}x + 2 = 8 \\ - 2 \quad - 2 \\ \hline \frac{2}{3}x = 6 \\ \left(\frac{3}{2}\right) \times \frac{2}{3}x = 6 \left(\frac{3}{2}\right) \\ x = \frac{18}{2} = 9 \end{array}$$

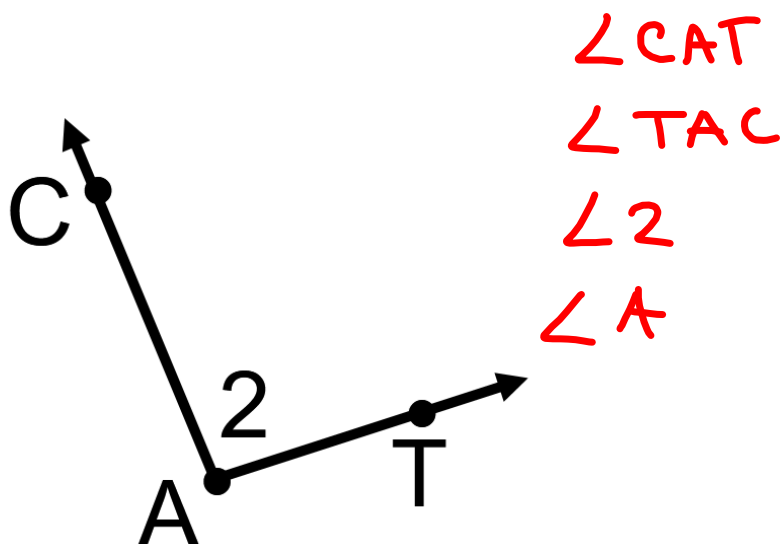
$$3. \quad 11x - 21 = 17 - 8x \quad (X = 2)$$

$$\begin{array}{r} 11x - 21 = 17 - 8x \\ + 8x \quad + 8x \\ \hline 19x - 21 = 17 \\ + 21 \quad + 21 \\ \hline 19x = 38 \\ \frac{19x}{19} = \frac{38}{19} \\ x = 2 \end{array}$$

Symbols to Know



Name this angle 4 different ways.



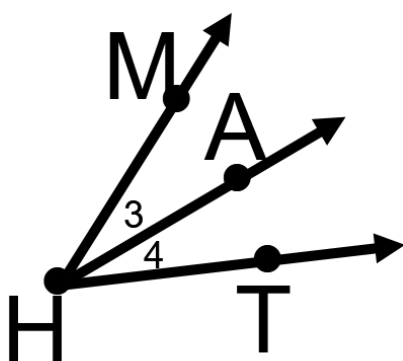
Name the ways can you name $\angle 3$?

$\angle MHA$, $\angle AHM$

Name the ways can you name $\angle 4$?

$\angle THA$, $\angle AHT$

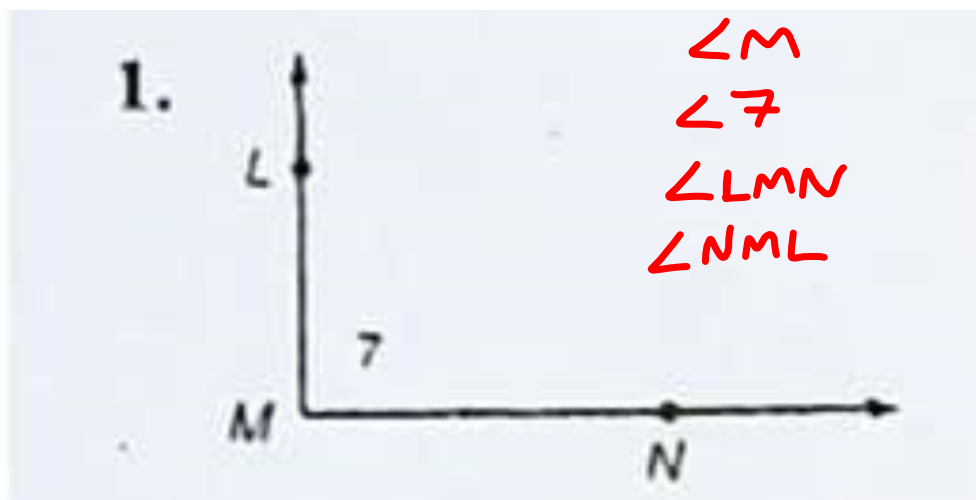
Name the ways can you name $\angle MHT$?



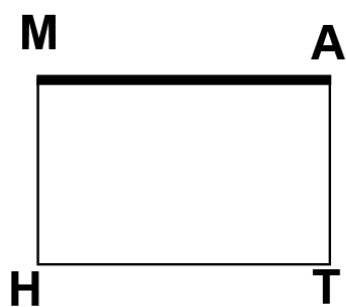
$\angle THM$

Cannot call it
 $\angle H$ - because
it is ambiguous!

Name the angle 4 ways.



How do you name the **bolded** side?



\overline{MA} or \overline{AM}

What side is opposite the bolded side?

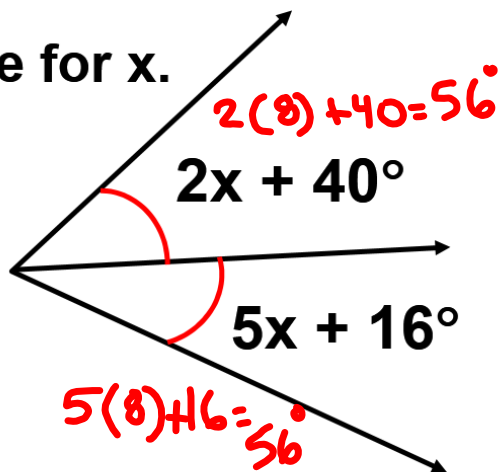
\overline{HT} or \overline{TH}

Angle Bisector

Cuts an angle in to two
congruent angles

*If angles are congruent,
their measures are equal!*

Solve for x.

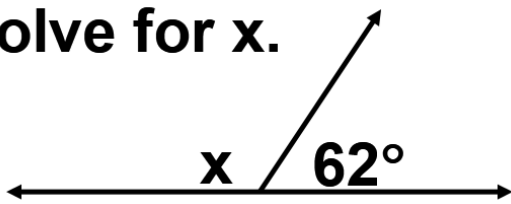


$$\begin{array}{r}
 2x + 40 = 5x + 16 \\
 \underline{-2x \quad -2x} \\
 40 = 3x + 16 \\
 \underline{-16 \quad -16} \\
 24 = 3x \\
 \frac{24}{3} = \frac{3x}{3} \\
 x = 8
 \end{array}$$

Linear Pair

Two angles that are side-by-side, share a common vertex, share a common ray, & create a line.

Solve for x.



Equation:

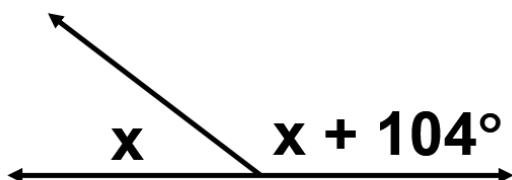
$$\underline{x} + \underline{62^\circ} = 180^\circ$$

$$\begin{array}{r} -62 \\ \hline \end{array}$$

$$\begin{array}{r} -62 \\ \hline \end{array}$$

$$x = 118^\circ$$

The following angles are linear pairs.
Solve for x .

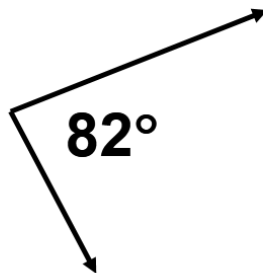
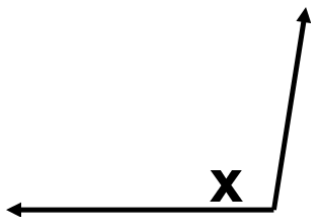


Supplementary Angles

Two angles that add up to ____.

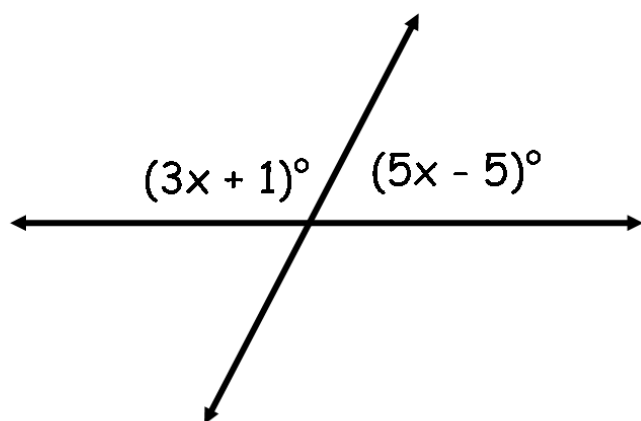
Equation:

$$\underline{\quad} + \underline{\quad} = 180^\circ$$



Solve for x if the following 2 angles are supplementary.

What type of angles are shown below?



Solve for x.

$\angle 13$ and $\angle 14$ are supplementary angles

$m\angle 13 = 47^\circ$. Find $m\angle 14$.

One of two supplementary angles is 46 degrees more than its supplement. Find the measure of both angles.

1st Angle:

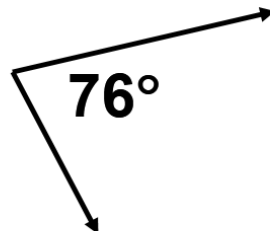
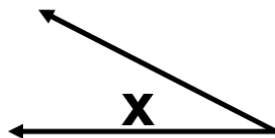
2nd Angle:

Complementary Angles

Two angles that add up to ____.

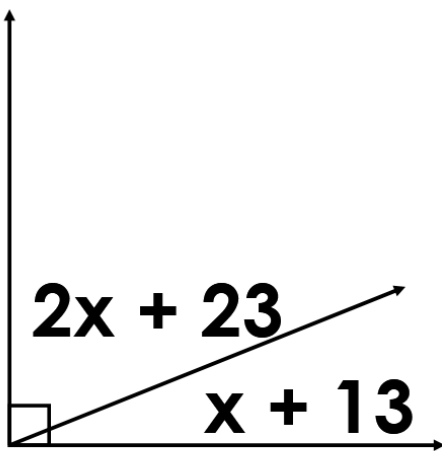
Equation:

$$\underline{\quad} + \underline{\quad} = 90^\circ$$



**Solve for x if
the following 2
angles are
complementary.**

Solve for x .



One of two complementary angles is 16 degrees less than its complement. Find the measure of both angles.

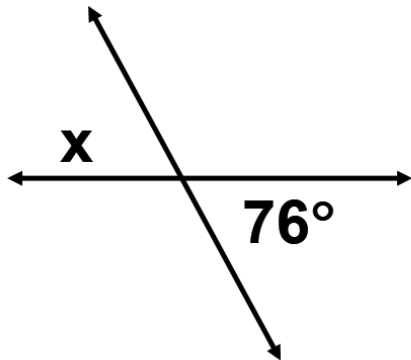
1st Angle:

2nd Angle:

Vertical Angles

Two angles that share a common _____ and their sides form two pairs of _____ rays.

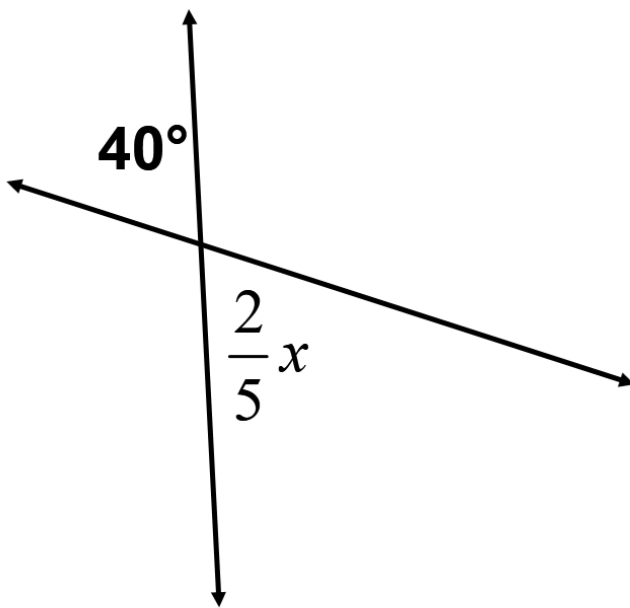
Solve for x.



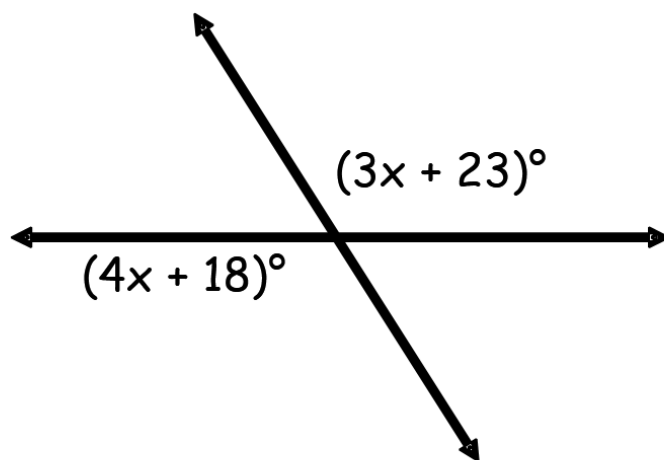
Equation:

_____ = _____

Solve for x.

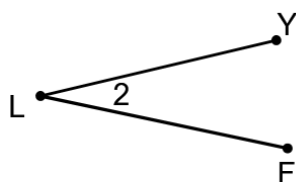


Solve for x.



Recap:

Name the below angle 4 different ways.



Two angles that have a sum of 90 degrees are called _____.

What does it mean if two angles are supplementary?

Name the angle relationship between the following angle pairs.

$\angle GLO$ and $\angle FLY$: _____

$\angle OLG$ and $\angle FLG$: _____

What is $m\angle OLG + m\angle FLG =$ _____?

