

Warm Up

Solve each equation

1.) $5x + 6 + 2x - 14 = 90$

2.) $4x - 30 + x + 25 = 180$

3.) $x/3 + 2 = x - 5$

4.) The chance of snow on Sunday is 60%. The chance of snow on Monday is 20%. What is the probability that it will snow both days?

1-4: Measuring Angles

Obj - SWBAT find and compare the measures of angles.

Vocabulary

Take note

Key Concept Angle

Definition

An **angle** is formed by two rays with the same endpoint.

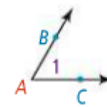
The rays are the **sides** of the angle. The endpoint is the **vertex** of the angle.

How to Name It

You can name an angle by

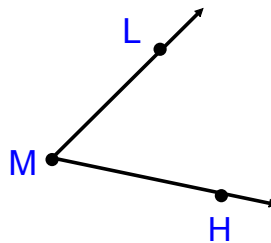
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Diagram

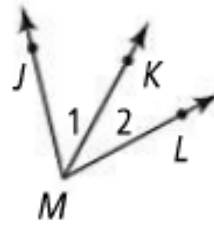


The sides of the angle are \overrightarrow{AB} and \overrightarrow{AC} .
The vertex is A .

interior
exterior



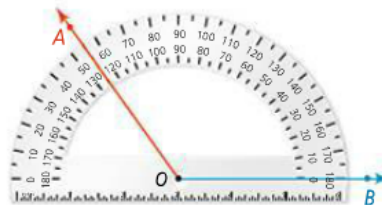
Ex. 1: What are two other names for $\angle KML$?



Take note

Postulate 1-7 Protractor Postulate

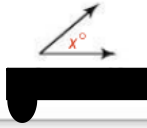
Consider \overrightarrow{OB} and a point A on one side of \overrightarrow{OB} . Every ray of the form \overrightarrow{OA} can be paired one to one with a real number from 0 to 180.



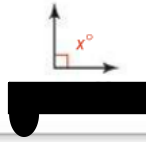
Take note

Key Concept Types of Angles

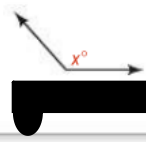
acute angle



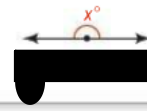
right angle



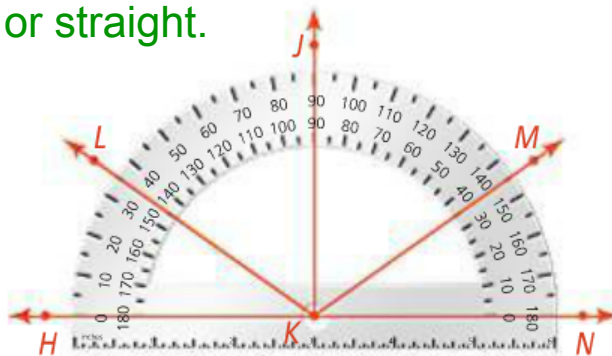
obtuse angle



straight angle



Ex. 2: What are the measures of $\angle LKH$, $\angle HKN$, and $\angle MKH$? Classify each angle as acute, right, obtuse, or straight.



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Homework Answers pg. 31

6.) $\angle XYZ$, $\angle ZYX$, $\angle Y$

7.) $\angle ABC$, $\angle CBA$, $\angle B$, $\angle 1$

8.) $\angle JKM$, $\angle MKJ$, $\angle 2$

9.) 70, acute

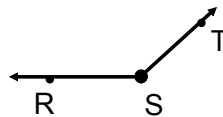
10.) 90, right

11.) 110, obtuse

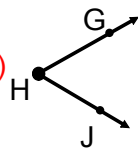
12.) 25, acute

13.) 85, acute

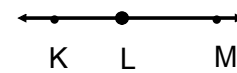
14.) 20, acute

15.) 

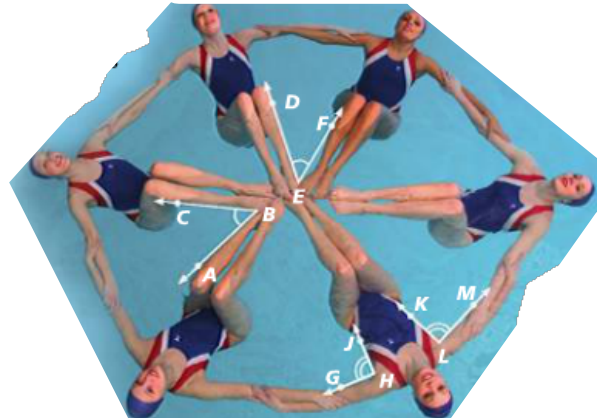
16.)



17.)



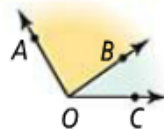
Ex. 3: Use the photo below. If $m\angle ABC = 49$, what is $m\angle DEF$?



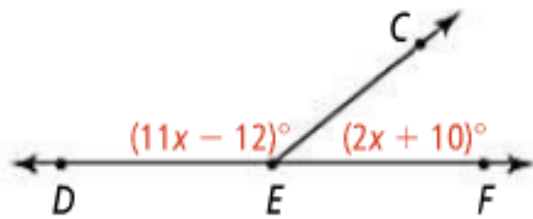
take note

Postulate 1-8 Angle Addition Postulate

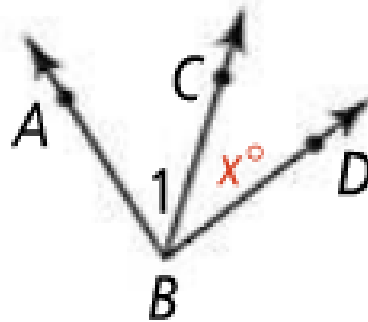
If point B is in the interior of $\angle AOC$, then $m\angle AOB + m\angle BOC = m\angle AOC$.



Ex. 4: $\angle DEF$ is a straight angle. What are $m\angle DEC$ and $m\angle CEF$?



Ex. 5: If $m\angle ABD = 85$, what is an expression to represent $m\angle ABC$?



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