

Lesson 1.2.2: Transversals

Targets:

1. I can find unknown angles using the rules of transversals.

Warm Up

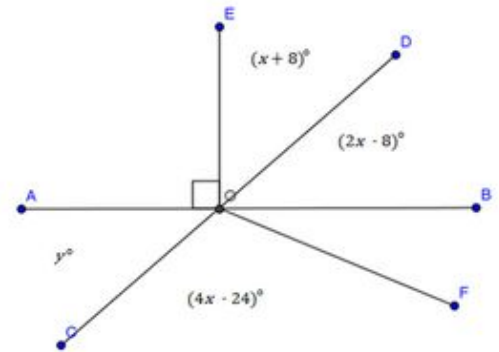
Use the diagram at the right to determine x and y . \overline{AB} and \overline{CD} are straight lines.

$$x = \underline{\hspace{2cm}}$$

$$y = \underline{\hspace{2cm}}$$

Name a pair of vertical angles:

Find the measure of $\angle BOF$. Justify your calculation.



Vocab

These terms are extremely important for this unit. Please watch the video and listen closely as you take notes here:

1. Transversal:

2. Corresponding Angles:

3. Alternate Interior Angles:

Rules for Transversals and Parallel Lines

Watch this video AND take all the notes. Again, this information will be very important for this lesson and many future lessons.

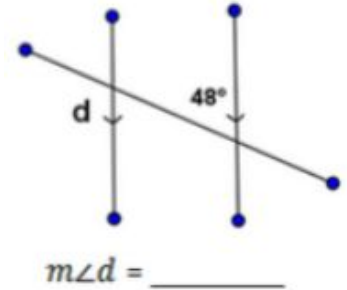
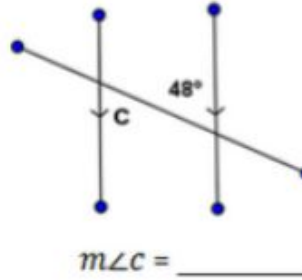
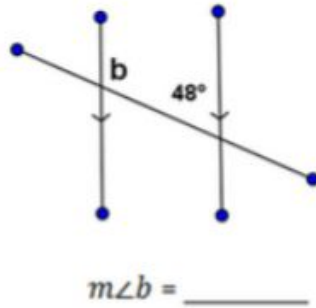
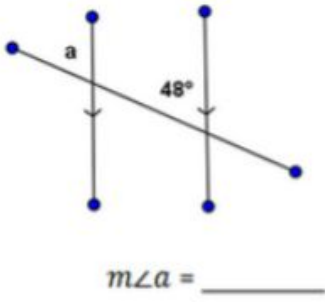
1. Rule #1:

2. Rule #2:

3. Rule #3:

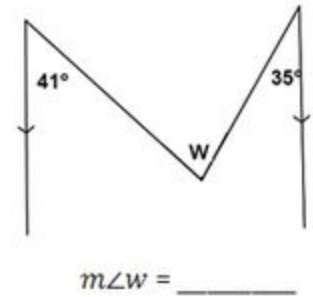
Practice 1

Use the rules you just learned to find the missing angle measures below. Make sure to justify your answer with an appropriate rule.



Practice 2

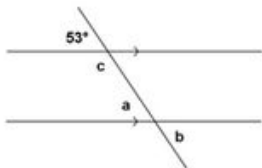
This problem is a bit more challenging. Attempt it on your own first, then watch the video to learn about something called an “Auxiliary Line.”



Exit Ticket

Work on the following problems. Your task is to find the unknown angle measures. Remember to use an auxiliary line when necessary. Also, keep in mind, the sum of the interior angles of a triangle is 180 degrees. In addition to just finding the unknown angle measures, you need to also **give a reason for your solutions.**

1.

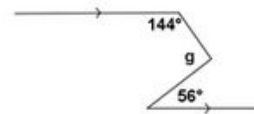


$m\angle a = \underline{\hspace{2cm}}$

$m\angle b = \underline{\hspace{2cm}}$

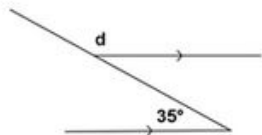
$m\angle c = \underline{\hspace{2cm}}$

4.



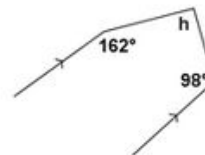
$m\angle g = \underline{\hspace{2cm}}$

2.



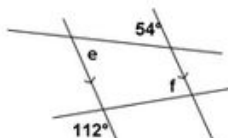
$m\angle d = \underline{\hspace{2cm}}$

5.



$m\angle h = \underline{\hspace{2cm}}$

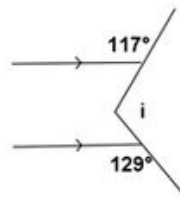
3.



$m\angle e = \underline{\hspace{2cm}}$

$m\angle f = \underline{\hspace{2cm}}$

6.



$m\angle i = \underline{\hspace{2cm}}$