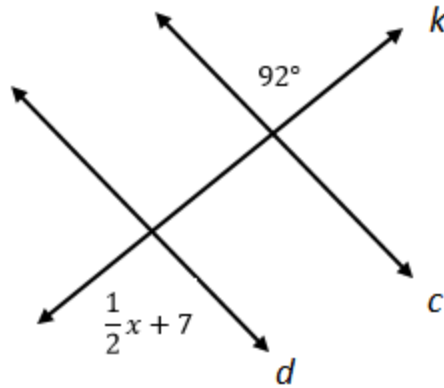


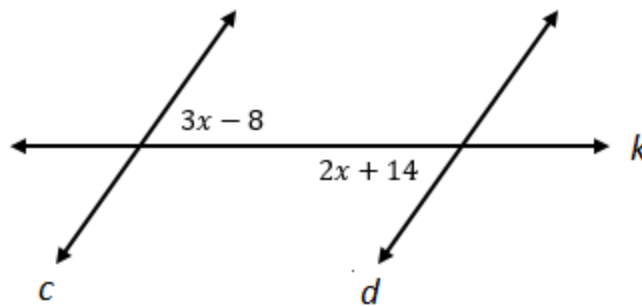
Name: _____

Date: _____

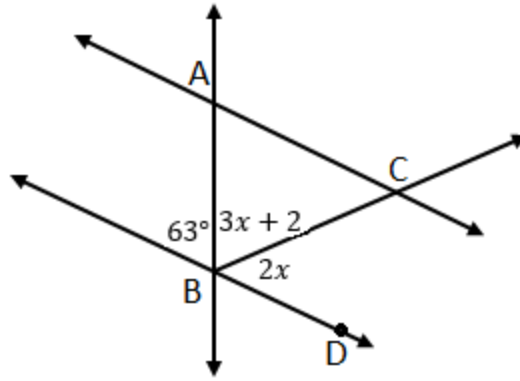
1. Lines c and d are parallel and cut by transversal k . Find the value of x .



2. Lines c and d are parallel cut by transversal k . Find the value of x .

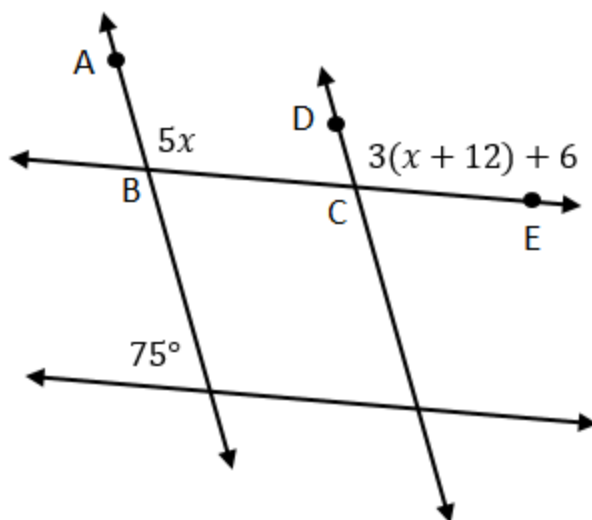


3. Lines AC and BD are parallel cut by transversal lines AB and BC .



- What is the value of x ?
- What is the value of $\angle ABC$?
- What is the value of $\angle CBD$?

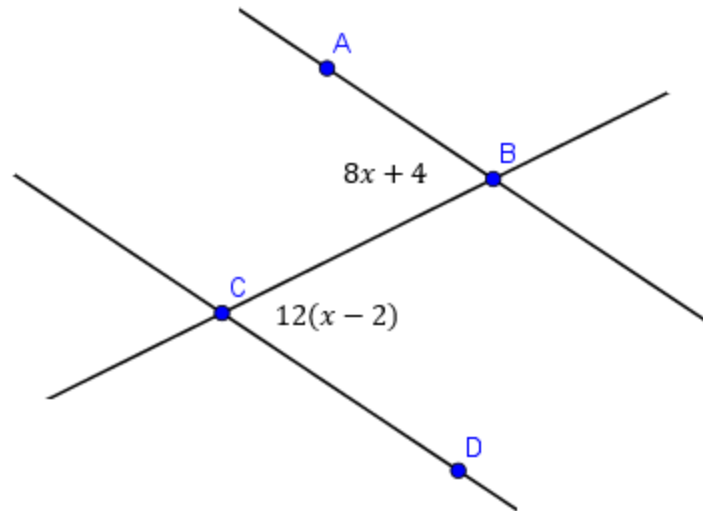
4. In the diagram below, two pairs of lines intersect to create a parallelogram.



a. What is the measure of $\angle ABC$?

b. Can you think of a second way to determine the measure of $\angle ABC$?

5. The line diagram below shows two parallel lines, AB and CD , cut by a transversal, BC .

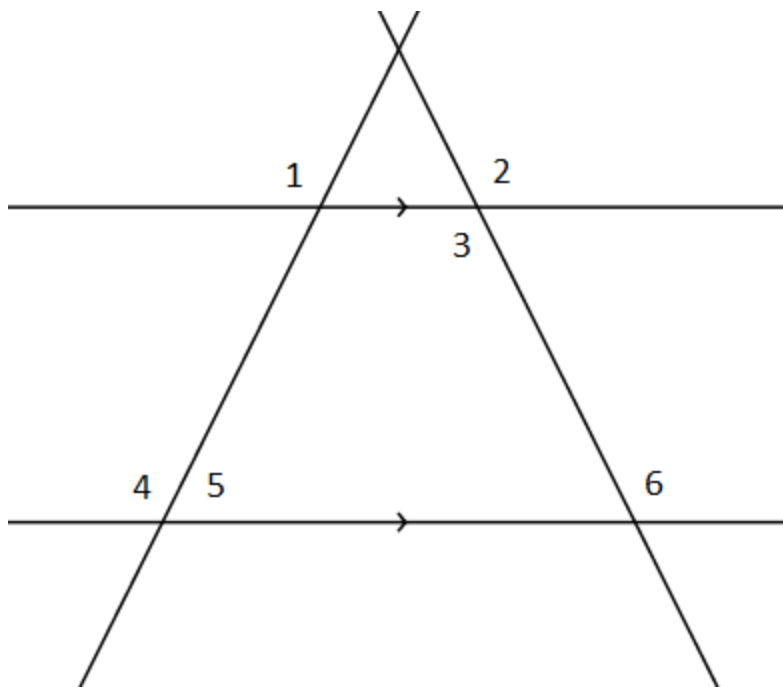


Sherry is looking to determine the value of $\angle BCD$. She begins by setting up the equation below:

$$8x + 4 + 12(x - 2) = 180$$

- Will this equation help Sherry find the value of $\angle BCD$? Explain your reasoning.
- Find the angle measure of $\angle BCD$.

6. Use the diagram below to answer the questions that follow.



a. If given $m\angle 1$, how can you determine the $m\angle 4$?

b. If given $m\angle 3$, how can you determine the $m\angle 6$?

c. If given $m\angle 1$, how can you determine the $m\angle 5$?

d. The $m\angle 1$ is represented by $15(x + 2)$ and $m\angle 5$ is represented by $9x + 6$. What is the angle measure of $\angle 1$?