

Show all work neatly, and circle your answers.

This question can be done after we have finished lesson 6.1.5

CL 6-100. Write the converse of each statement and then determine whether or not the converse is true.

- a. If two lines are parallel, then pairs of corresponding angles are equal.

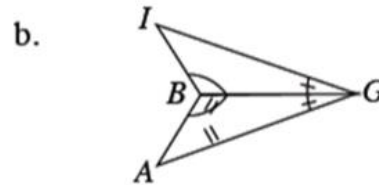
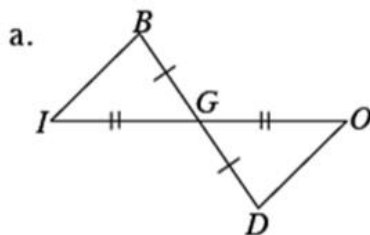
- b. In $\triangle ABC$, if the sum of $m\angle A$ and $m\angle B$ is 110° , then $m\angle C = 70^\circ$.

- c. If alternate interior angles k and s are not equal, then the two lines cut by the transversal are not parallel.

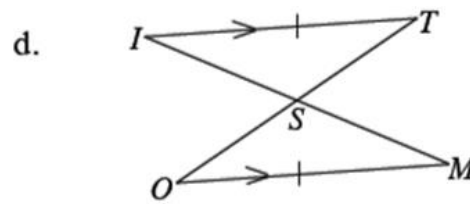
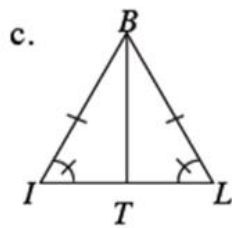
- d. If Johan throws coins in the fountain, then he loses his money.

This question can be done after we have finished lesson 6.1.4

CL 6-101. Determine whether or not the two triangles in each part below are congruent. If they are congruent, show your reasoning in a flowchart. If the triangles are not congruent or you cannot determine that they are, justify your conclusion.

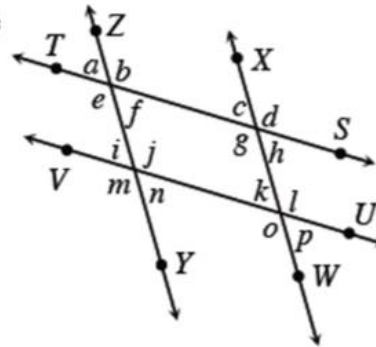


CL 6-101 continued...

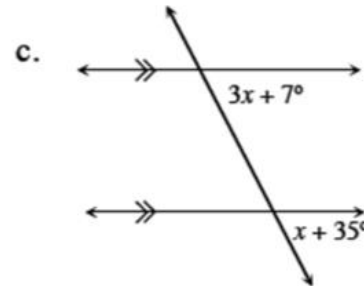
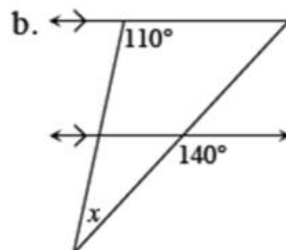
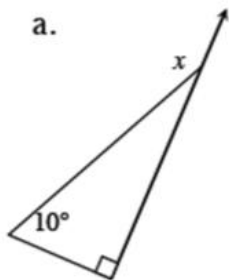


CL 6-102. For each part, determine which lines, if any, are parallel. Be sure to justify your decisions.

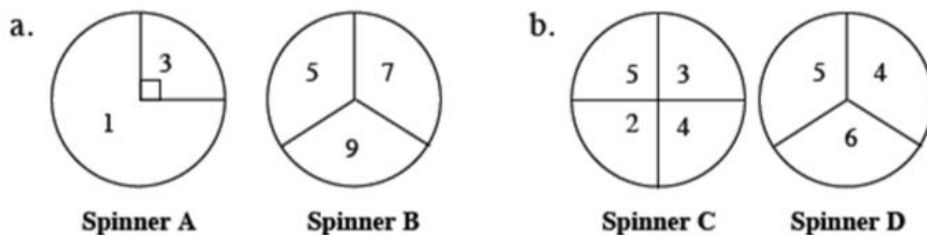
- a. $\angle e \cong \angle m$ b. $\angle c \cong \angle o$
 c. $\angle d \cong \angle o$ d. $\angle a \cong \angle m \cong \angle o$
 e. $\angle a \cong \angle k$ f. $\angle k \cong \angle c \cong \angle f$



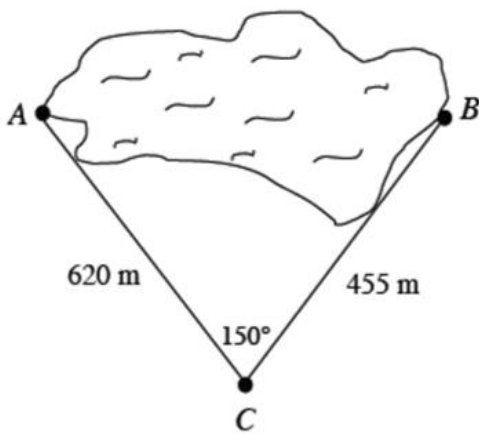
CL 6-103. For each diagram, solve for the variable. Be sure to include the names of any relationships you used to get your solution.



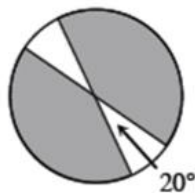
- CL 6-104. Cynthia is planning a party. For entertainment, she has designed a game that involves spinning two spinners. If the sum of the numbers on the spinners is 10 or greater, the guests can choose a prize from a basket of candy bars. If the sum is less than 10, then the guest will be thrown in the pool. She has two possible pairs of spinners, shown below. For each pair of spinners, determine the probability of getting tossed in the pool. Assume that Spinners B, C, and D are equally subdivided.



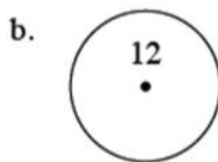
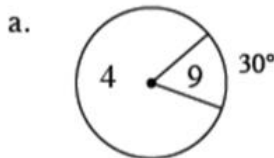
- CL 6-105. Yee Ping thought about swimming across Redleaf Lake. She knows that she can swim about 1000 meters. She decided that she would feel more confident if she knew how far she would have to swim. To determine the length of the lake, she put posts at both ends of the lake (points *A* and *B*) and a third post on one side of the lake (point *C*). The distances between the posts are shown in the diagram at right. She measured the angle between the two posts and found that it was 150° . Use this information to determine the length of the lake. Do you think that Yee Ping will be able to swim between points *A* and *B*?



- CL 6-106. Your teacher has constructed a spinner like the one at right. He has informed you that the class gets one spin. If the spinner lands on the shaded region, you will have a quiz tomorrow. What is the probability that you will have a quiz tomorrow? Explain how you know.



- CL 6-107. For each spinner below, find the expected value of one spin.



- CL 6-108. Margarite has 9 pieces of copper pipe with which she plans to make 3 triangular frames. She has organized them into groups of three based on their coloring. The lengths of the pipes in each group are listed below.

i. 23, 21, 4

ii. 2, 11, 10

iii. 31, 34, 3

- a. Which groups, if any, will she actually be able to use to make a triangular frame if she is unable to cut any of the pipes? How do you know?
- b. If possible, arrange the 9 pieces she has so that she can make 3 triangular frames. If so, how? If not, why not?

CL 6-109. At a story-telling class, Barbara took notes on the following story. However, all the parts of the story got mixed up. Help her make sense of the story by organizing the following details in a flowchart. In your flowchart, can just write the letter for each statement, instead of the complete sentences.

- a. Maggie was happy she could play on the same team as Julie and Cheryl.
- b. Julie was hoping to make the A team again this year as she grabbed her basketball and got on a bus in Bellingham.
- c. Cheryl, having been named most valuable player in Port Townsend, started the drive to the statewide basketball camp.
- d. Because of her skill in the first game, Maggie moved up to the A team.
- e. At camp, Julie and Cheryl were placed on the A team.
- f. Julie, Maggie and Cheryl met at a statewide basketball camp. Shortly after they met, they were placed on teams.
- g. This year was Maggie's first year at camp, and she was placed on the B team.
- h. On the train to camp, Maggie thought about how surprising it was that her basketball coach chose her to attend camp.

CL 6-110. The following questions are part of the grade for this packet – do not skip them! Take a few minutes to reflect on the closure packet, as well as the work you have done in this chapter. Be complete and specific in your answers. If there are things that you need help with, be sure to **SEE YOUR TEACHER OR GO TO MATH HELP BEFORE THE DAY OF THE TEST!**

Which **problems** in the closure packet do you feel confident about?

Which **problems** were difficult?

Make a list of **topics** from the chapter that you feel **you need to practice more.**

Make a list of **topics** from the chapter you feel **you need help with.**