4. WHAT HAVE I LEARNED?

Most of the problems in this section represent typical problems found in this chapter. They serve as a gauge for you. You can use them to determine which types of problems you can do well and which types of problems require further study and practice. Even if your teacher does not assign this section, it is a good idea to try these problems and find out for yourself what you know and what you still need to work on.

Solve each problem as completely as you can. The table at the end of the closure section has answers to these problems. It also tells you where you can find additional help and practice with problems like these.

CL 2-118. Sandra's music bag contains:

3 traditional country songs
6 traditional rock songs
4 hip-hop rap songs
5 contemporary country songs
1 Latin rap song
3 traditional pop songs

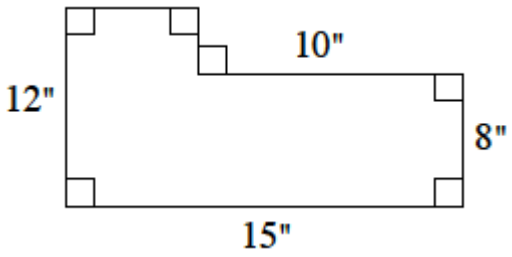
a. What is the probability that the player will select some rap music next?

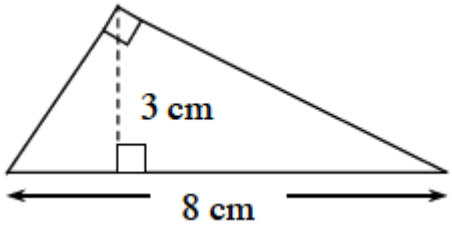
b. Find P(traditional), that is, the probability that the player will randomly select traditional music of any kind.

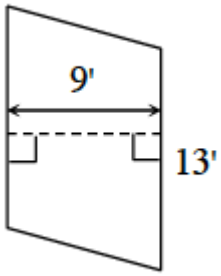
c. Find P(traditional pop).

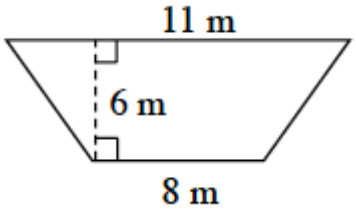
d. Find P(not country), the probability that the next song is *not* country music.

CL 2-119. Find the area of each figure.

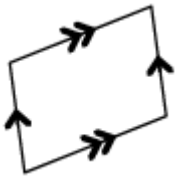
a. 

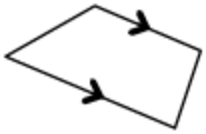
b. 

c. 

d. 

CL 2-120. Name each of the following shapes.

a. 

b. 

c. 

d. 

e. 

f. Graph the following points and then name the shape that is created when you connect the points in the given order.

$N(-2, 6)$, $A(-4, 6)$, $M(-4, 3)$, $E(-2, 3)$

CL 2-121. Graph the segment that connects the points $A(-4, 8)$ and $B(6, 3)$.

a. What is the slope of $\overline{AB}$?

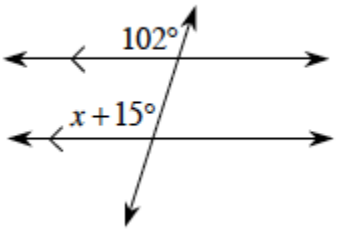
b. Write an equation for the line that connects points *A* and *B*.

c. Write an equation for a line that is parallel to $\overline{AB}$.

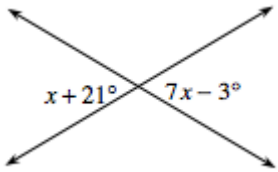
d. Write an equation for a line that is perpendicular to $\overline{AB}$.

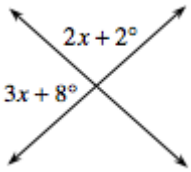
CL 2-122. Identify the geometric angle relationship(s) in each diagram. Use what you know about those relationships to write an equation and solve for *x*.

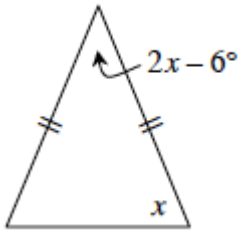
a.



b.



c. 

d. 

CL 2-123. Examine the system of equations below.

$y = -2x + 6$

$y = \frac{1}{2}x - 9$

a. Solve the system below *twice*: graphically and algebraically. Verify that your solutions from the different methods are the same.

b. What is the relationship between the two lines? How can you tell?

c. Solve the system below using your method of choice.

$2x + 3y = 18$

$4x - 3y = 6$

CL 2-124. Charlotte was transforming the hexagon *ABCDEF*.

a. What single transformation did she perform in Diagram #1?

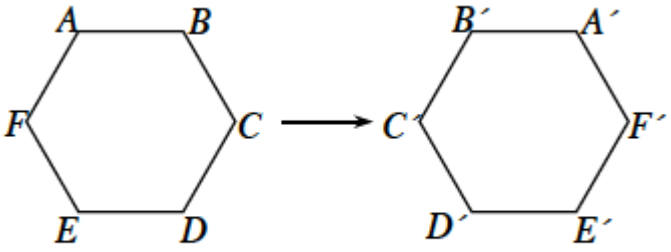


Diagram #1

b. What single transformation did she perform in Diagram #2?

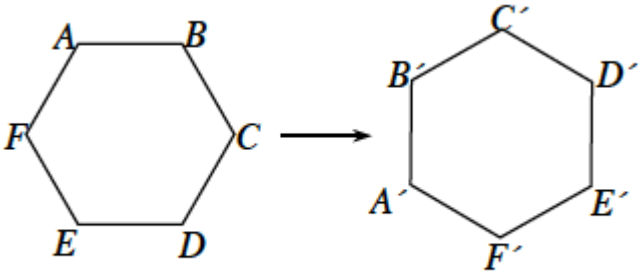


Diagram #2

c. What transformation didn't she do? Write directions for this type of transformation for hexagon *ABCDEF* and perform it.

CL 2-125. Explain what you are doing when you find the perimeter of a flat shape. How is that different than finding its area?

CL 2-126. Check your answers using the table at the end of this section. Which problems do you feel confident about? Which problems were hard? Have you worked on problems like these in math classes you have taken before? Use the table to make a list of topics you need help on and a list of topics you need to practice more.