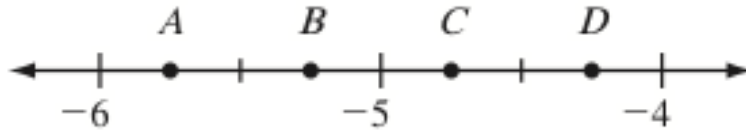Name: _____   Period: _____

Math 7: MCA 2 Practice - Graphs

Directions: Read each question carefully. Show your work or explain your answer for each problem.

1.   Points *A, B, C and D* are shown on the number line below. Which point best represents the location of -5.75?

   A.   Point A

   B.   Point B

   C.   Point C
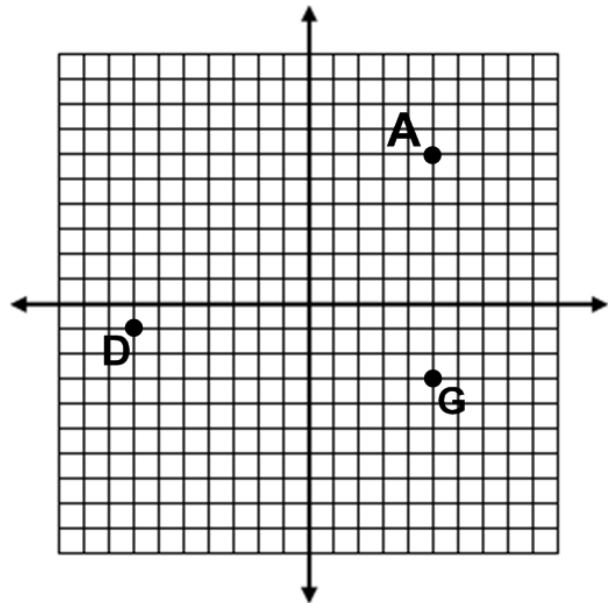
   D.   Point D

2.   Use the graph below to identify the coordinates of the
        following points:

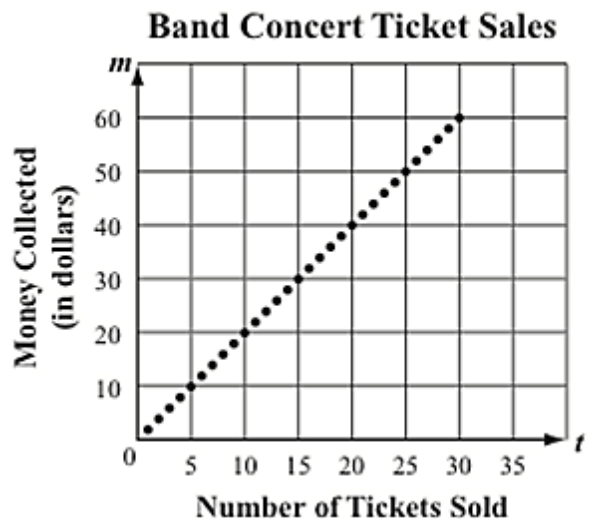   A (_____)   Quadrant _____

   D (_____)   Quadrant _____

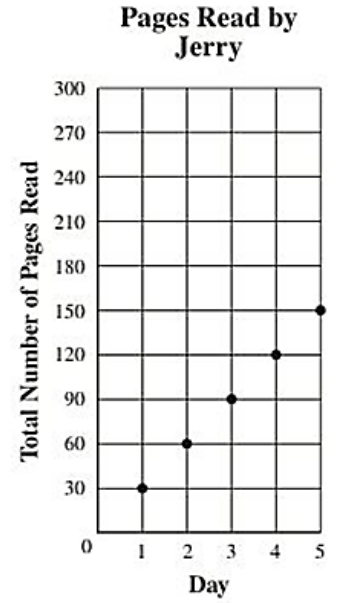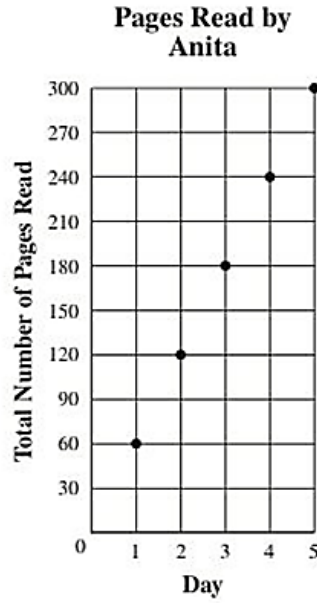   G(_____)   Quadrant _____

3.   For the data in the graph, which of the following
        equations can be used to calculate *m*, the amount of
        money, in dollars, collected for *t* tickets sold?

   A. $m = \frac{1}{2}t$

   B. $m = 2t$

   C. $m = 5t$

   D. $m = 10t$
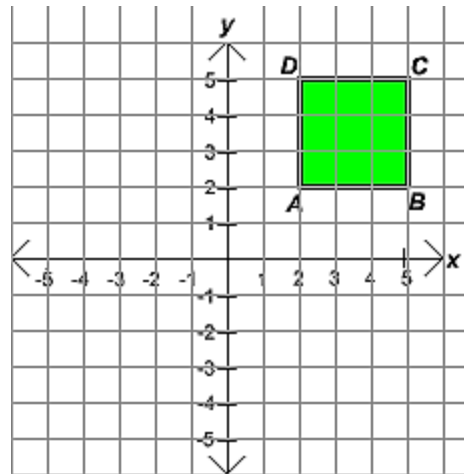
Band Concert Ticket Sales

4.   Anita and Jerry are reading the same book. The graphs below show the number of pages Anita and Jerry read each day for five days. What is the relationship between the number of pages Anita read each day and the number of pages Jerry read each day?

A.   Anita read half the number of pages Jerry read each day.

B.   Anita read the same number of pages Jerry read each day.

C.   Anita read two times the number of pages Jerry read each day.

D.   Anita read three times the number of pages Jerry read each day.

Pages Read by Anita

Pages Read by Jerry

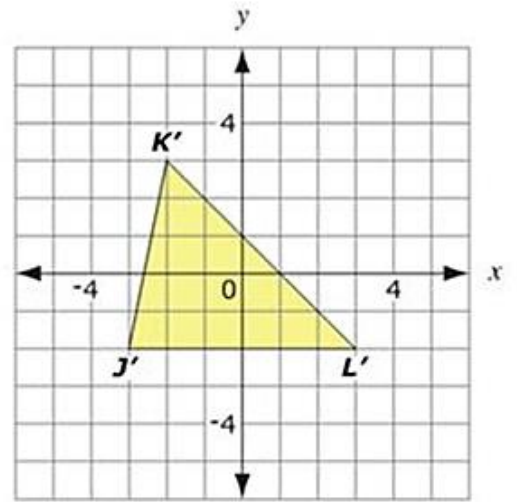5.   What would be the new coordinates of point B after the translation of $(x, y) \rightarrow (x - 7, y - 3)$

A.   (-5, 2)

B.   (-2, 5)

C.   (-2, -1)

D.   (2, 1)

6. The translation $(x, y) \rightarrow (x - 4, y + 5)$ was used to move ΔJKL to ΔJ'K'L'.

ΔJ'K'L' is shown on the grid. What are the coordinates of point K?

A. (-6, 8)

B. (-4, 5)

C. (-2, 3)

D. (2, -2)

7. The point (3, - 4) is translated 2 units to the right and 3 units up. What are the coordinates of the point?

8. Gini's test scores are 95, 82, 76, and 88. What score must she get on the fifth test in order to achieve an average of 84 on all five tests?
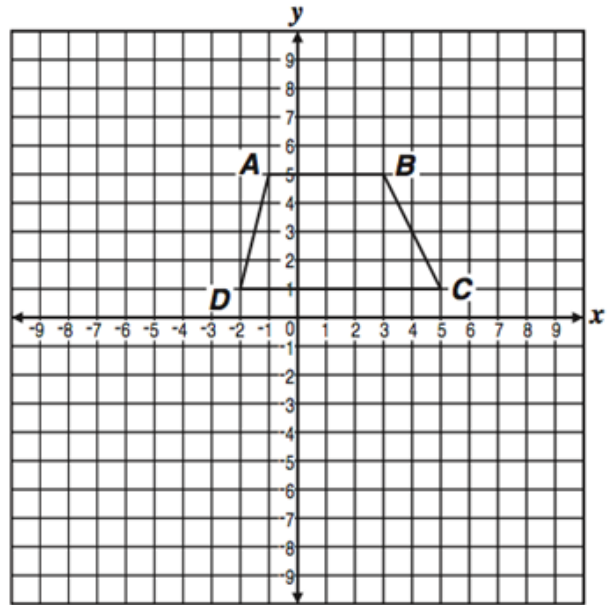
9. Which set has the greater range? How much greater is that set's range?

Set T: {3, 11, 7, 20, 2, 9}

Set W: {6, 11, 21, 19, 17, 5}

10. What would be the new coordinates of point B after the reflection of $(x, y) \rightarrow (x, y \cdot -1)$?

   A. (3, -5)

   B. (-3, 5)

   C. (3, 5)

   D. (-3, -5)

11. David earned the following scores on his science tests this semester: 87, 92, 81, 95, 83.

   David wants to raise his mean with the next test that he takes in science. What is the lowest score he could get that would still raise his mean? (Round to the nearest whole number)

   A. 80

   B. 87

   C. 88

   D. 96

12. Charlie's scores for eight assignments are given below. If the median for his scores is 25, what is the possible value for x?

   21   27   31   23   28   18   23 x

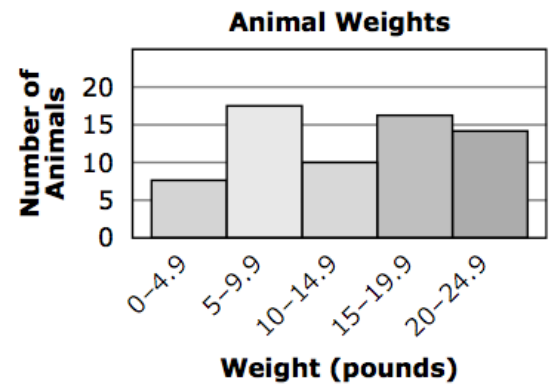13. Use the stem-and-leaf plot to answer the questions below. Show all your work.

Stem	Leaves
19	2 6
20	2 8
21	2 5 6
22	1 3 4 6
23	2
24	0
25	
26	
27	0

Key   19|2 = 192

A.   How many games scored at least 223?

B.   What is the range of the data set?

C.   What is the median of the data set?
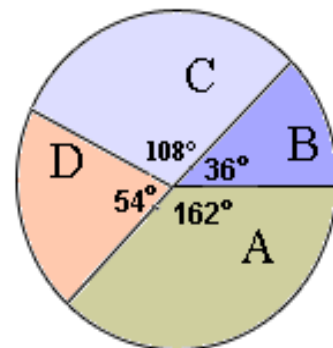
D.   What is the mean of the data set?

14.   A veterinarian recorded the weights of animals in a histogram. Which question can be answered using the information from the histogram?

A.   How many animals weigh 4.9 pounds?
B.   How many animals weigh between 5 and 10 lbs?
C.   How many animals weigh less than 8 pounds?
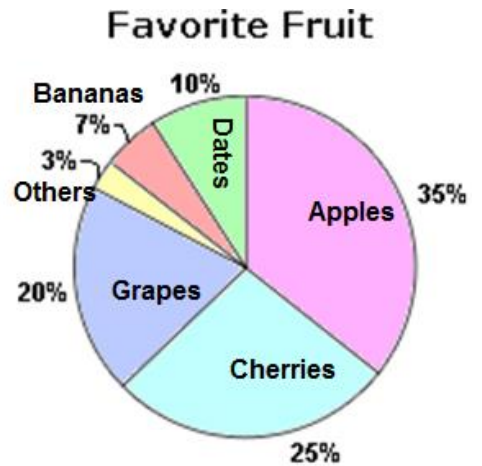D.   How many animals weigh at least 15 pounds?

Animal Weights

15.   Find the **angle** covered by A, B, and C in the circle graph.

A.   306 degrees

B.   162 degrees

C.   36 degrees

D.   108 degrees

16.   The circle graph below represents the percentages of people who like different fruits. Find the number of people who like apples, if the total number of people is 1000.

A.   300

B.   250

C.   400

D.   350

Favorite Fruit

17.   The discounts offered by a super market are as shown in this table. Which of these histograms is the correct representation of the data?

A.   Figure 1

B.   Figure 2

C.   Figure 3

D.   Figure 4

Amount (in $)	Discount%
1,000 - 1,999	2
2,000 - 2,999	4
3,000 - 3,999	6
4,000 - 4,999	8
5,000 - 5,999	10

Figure 1
Discounts Offered by a
Super Market

Figure 2
Discounts Offered by a
Super Market

Discounts Offered by a
Super Market

Figure 3

Discounts Offered by a
Super Market

Figure 4