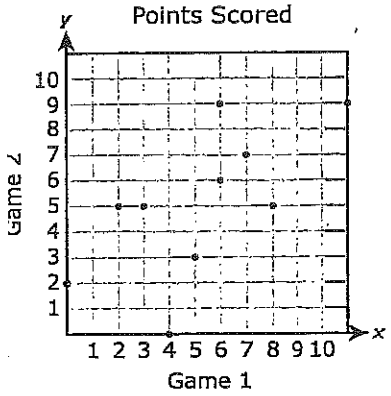
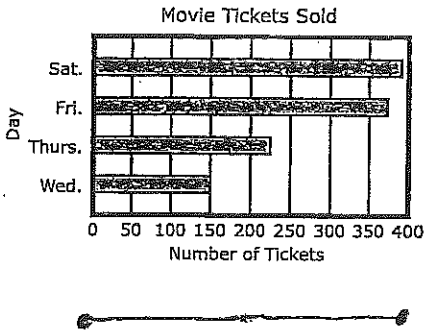
UNIT 6 REVIEW! DUE MONDAY JANUARY 11, 2016 TEST ON TUESDAY JANUARY 12, 2016

1. Marvin is analyzing the results of a recent election in his social studies class. Use pictures and words to explain how Marvin could us a bar graph to represent data for this class.

2. Under each representation, write dot plot, bar graph, stem-and-leaf plot, or scatterplot.

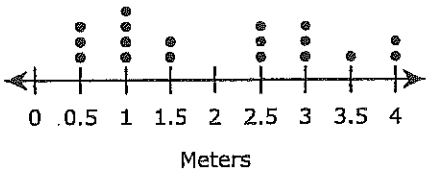




Quiz Scores

Stem	Leaves
6	7 7
7	9 9 9 6 3 0
8	2 2 8 8
9	1 1 4 4 4 7
10	0 0

10 | 0 represents 100



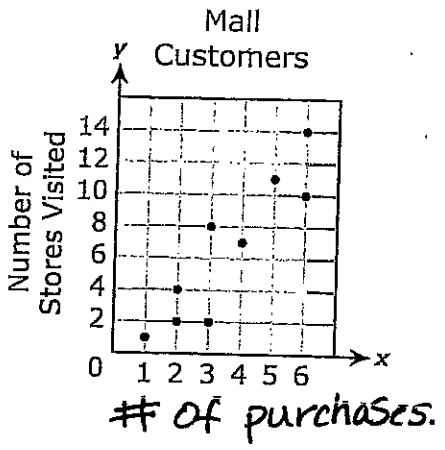
3. For an assignment, Betty must conduct a survey and create a scatterplot to display the results. Circle the pair of questions below that would work best for Betty's assignment.

- What is your favorite color? How many shirts of this color do you own?
- How many pets do you have? How many Minutes per week do you spend caring for them?
- How many miles do you live from school? What transportation do you use to travel to school?

Explain your choice:

Use the scatterplot to answer questions 4 and 5.

- The manager of a mall surveyed customers to determine the number of purchase they made in the mall and the number of stores they visited. The scatterplot shows the data.



4. Which statement is represented by the manager's scatterplot?

   a. One customer in the survey visited 7 stores and made 5 purchases.
   b. One customer in the survey made 14 purchases while visiting 6 stores
   c. One customer in the survey visited 1 store and made 1 purchases.
   d. One customer in the survey made 2 purchases while visiting 5 stores.

5. A new customer visits 4 stores without making any purchases. Which shows the point the manger will plot?

   a. (4, 0)
   b. (0, 0)
   c. (4, 4)
   d. (0, 4)

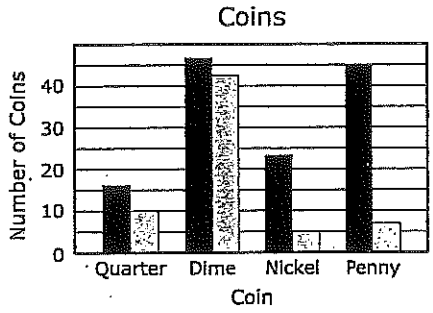
6. Mark surveys each member of his class to find their favorite colors. He wants to display the results of the survey, but he is having trouble deciding between a frequency table and a stem-and-leaf plot. Which should Mark use? Explain your answer?

7. A list of survey topics is shown below. For each topic, write *C* if the survey would produce categorical data. White *N* if the survey would produce numerical data.

   - Are you a boy or girl? _____
   - What is your hair color? _____
   - How many cousins do you have? _____
   - What is your age? _____
   - How many hours of TV do you watch each day? _____
   - What is your favorite type of music? _____

8. Kay has 45 pennies, 24 nickels, 36 dimes, and 18 quarters in her bank. Bo has 6 quarters, 5 dimes, 39 nickels, and 10 pennies in his bank. Which graph matches this data?

Ⓐ



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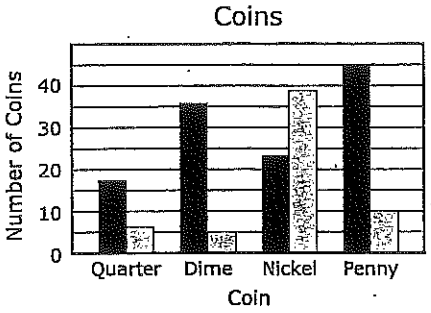

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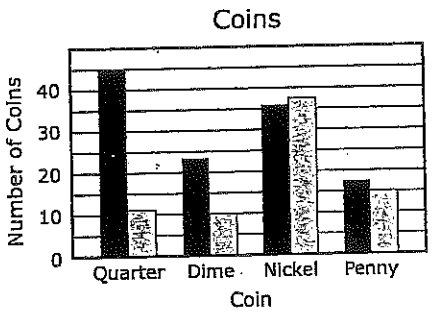

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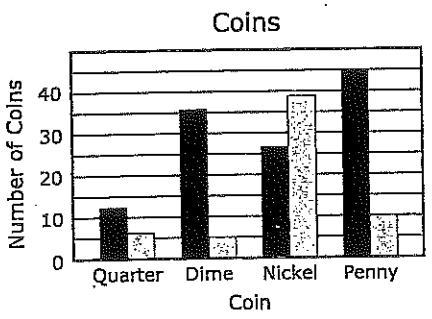


9. The judges at the watermelon festival recorded the weights of the watermelons entered in the competition for the largest watermelon. The results are shown in this chart.

Watermelon Weights (pounds)			
35	33	39	40
20	47	37	40
42	30	24	37

Complete the stem-and-leaf plot below to help the judges organize the data.

Watermelon Weights (lb.)

Stem	Leaves
2	
3	

2 | 0 represents 20

10. An entomologist measured the lengths of several insects to the nearest $\frac{1}{8}$ inch. The results are shown in this chart.

Length of insects

Insect label	Length (inches)
A	$\frac{1}{2}$
B	$\frac{7}{8}$
C	$\frac{7}{8}$
D	$\frac{1}{4}$
E	$\frac{7}{8}$

Insect label	Length (inches)
A	$\frac{1}{8}$
B	1
C	$\frac{3}{4}$
D	$\frac{1}{2}$
E	$\frac{1}{4}$

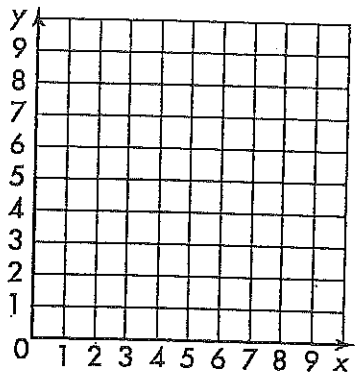
Create a dot plot to display the data.

11. Brayson asked some friends the type of pet they preferred.
    - Amy, Rick, and Cindy were the only students who preferred cats.
    - Morgan, Madison, and Lola were the only students who preferred fish.
    - The number of students who preferred birds was double the number of students who preferred fish.
    - The number of students who preferred hamsters was half as much as the number of students who preferred dogs.

Complete the frequency table to match the data. Then use the grid paper to represent the data another way. Be sure to include a title and labels in your representation.

Favorite Pets

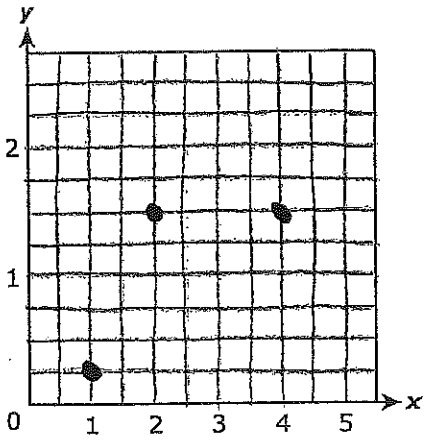
Type of Pet	Frequency



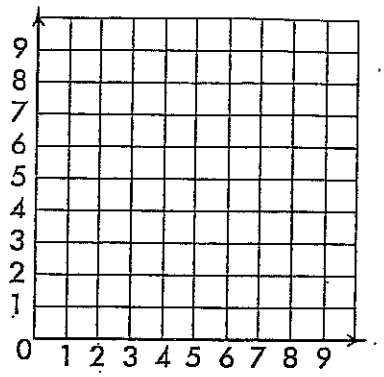
12. Gina plotted three vertices of an isosceles trapezoid on a coordinate plane.

Which could be the coordinates of the missing vertex of Gina's trapezoid?

a. (4 ½ , 0)
b. (5, ¼)
c. (3 ½ , ½)
d. (5, 1)



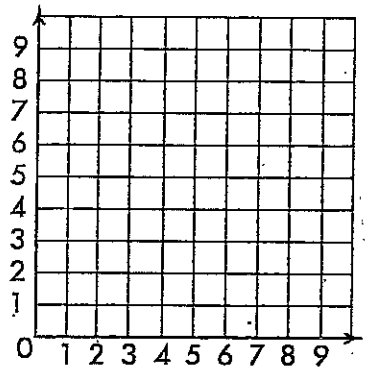
13. List and plot four points that will make a horizontal line. (__, __) (__,__) (__,__) (__,__)



- What did you notice about the x-coordinates when making a horizontal line?

- What did you notice about the y-coordinates when making a horizontal line?

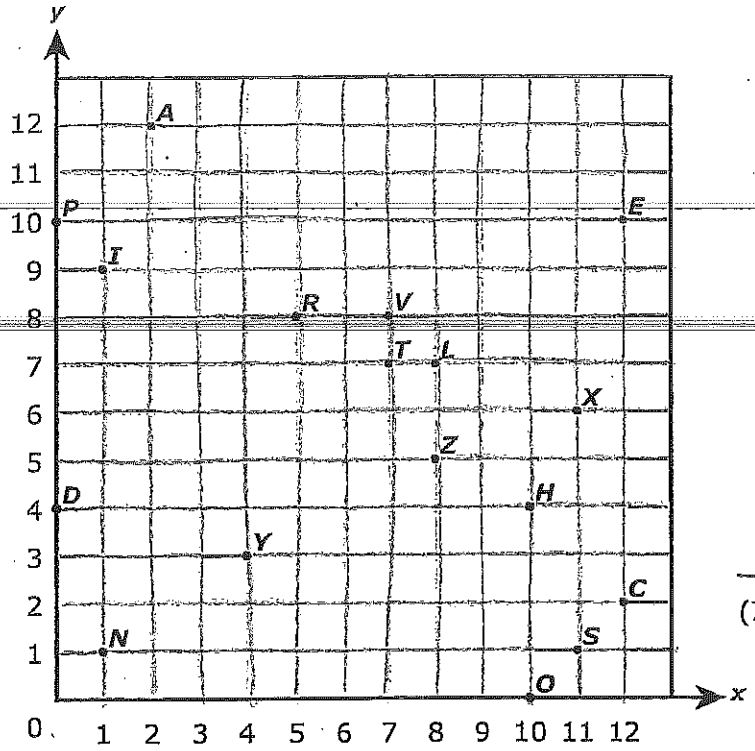
14. List and plot four points that will make a vertical line. (__, __) (__,__) (__,__) (__,__)



- What did you notice about the x-coordinates when making a horizontal line?

- What did you notice about the y-coordinates when making a horizontal line?

15. Find vocabulary words by matching each ordered pair with a letter on a coordinate plane.



____ ____ ____ ____ ____ ____

(11, 6) (2, 12) (11, 6) (1, 9) (11, 1)

____ ____ ____ ____ ____ ____

(4, 3) (2, 12) (11, 6) (1, 9) (11, 1)

____ ____ ____ ____ ____

(0, 10) (10, 0) (1, 9) (1, 1) (7, 7)

____ ____ ____ ____ ____ ____ ____ ____

(7, 8) (12, 10) (5, 8) (7, 7) (1, 9) (12, 2) (2, 12) (8, 7)

16. Follow directions using the coordinate plane below. You will need a set of colored pencils or crayons.
    - Trace and label the x-axis in red.
    - Trace and label the y-axis in blue.
    - Draw a green point at the origin.
    - Draw and label a rectangle PQRS in purple. The rectangle must have 2 long sides parallel to the x-axis and 2 short sides parallel to the y-axis.
    - Draw and label a triangle TUV in orange. One side of the triangle mist be perpendicular to the x-axis.
    - Draw another figure of your choice in brown. The figure must have 2 sides perpendicular to the y-axis and at least 1 side perpendicular to the x-axis.