

3.1 Defining Coordinate Planes & Plotting Points DAY TWO CYU

Use when you get it right all by yourself

S Use when you did it all by yourself, but made a silly mistake

H Use when you could do it alone with a little help from teacher or peer

G Use when you completed the problem in a group

X Use when a question was attempted but wrong (get help)

N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Plotting coordinates	1, 2		
Quadrant location	1, 2	3 - 16	
X and Y axes	1, 2	3 - 16	
Naming coordinates	17, 18	3 - 16	
Meaning of ordered pairs			17, 18
Creating a scatter diagram/plot			17 - 18
Stated trends			17 - 18

1 - 2: Plot each ordered pair and label it with its letter. State in which quadrant or on which axis each point lies.

- A) (1, 5) **I**

B) (-5, -2) **III**

C) (-3, 0) **x-axis**

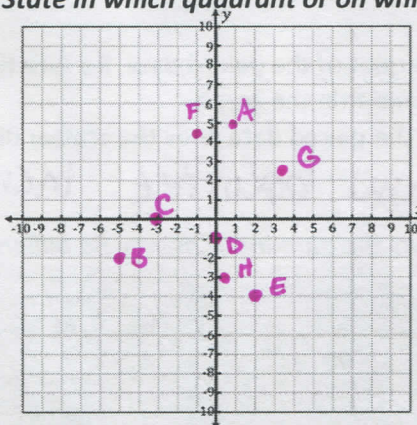
D) (0, -1) **y-axis**

E) (2, -4) **IV**

F) $(-1, 4\frac{1}{2})$ **II**

G) (3.7, 2.2) **I**

H) $(\frac{1}{2}, -3)$ **IV**



- A) (2, 4) **I**

B) (0, 2) **y-axis**

C) (-2, 1) **II**

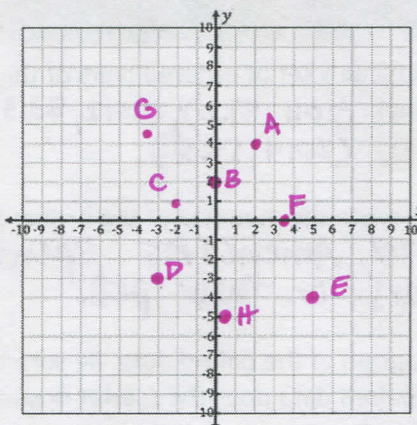
D) (-3, -3) **III**

E) (5, -4) **IV**

F) $(3\frac{3}{4}, 0)$ **x-axis**

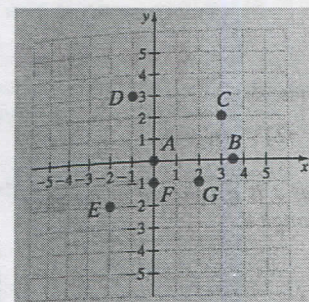
G) (-3.4, 4.8) **II**

H) $(\frac{1}{3}, -5)$ **IV**



3 - 9: Find the x- and y-coordinates of each labeled point. State the quadrant too.

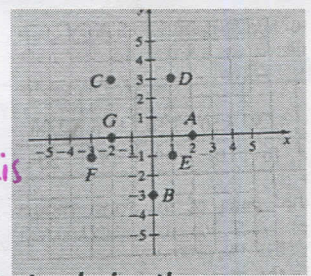
- | | |
|-----------------------------|----------------------------|
| 3. A (0, 0) both axes | 7. E (-2, -2) III |
| 4. B (3.5, 0) x-axis | 8. F (0, -1) y-axis |
| 5. C (3, 2) I | 9. G (2, -1) IV |
| 6. D (-1, 3) II | |



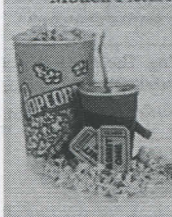
10 - 16: Find the x- and y-coordinates of each labeled point. State the quadrant too.

- 10. A (2,0) x-axis
- 11. B (0,-3) y-axis
- 12. C (-2,3) II
- 13. D (1,3) I

- 14. E (1,-1) IV
- 15. F (-3,-1) III
- 16. G (-2,0) x-axis

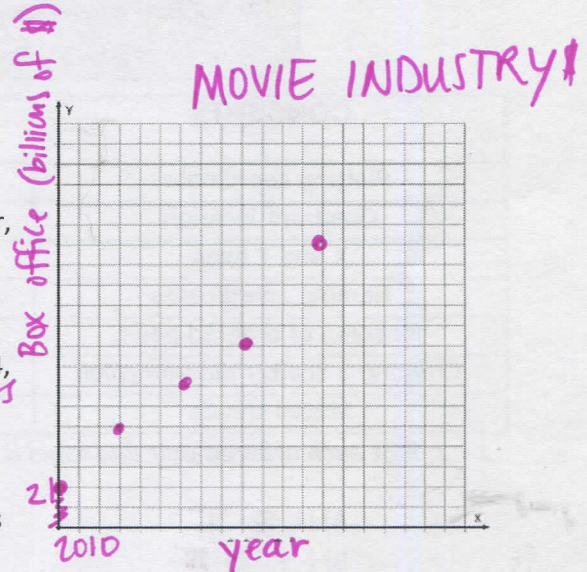


17. The table shows the worldwide box office (in billions of dollars) for the movie industry during the years shown.



Year	Box Office (in billions of dollars)
2010	21.0
2011	22.4
2012	23.9
2013	25.0
2014	28.0

- a) Write this paired data as a set of ordered pairs of the form (year, box office). $(2010, 21.0); (2011, 22.4); (2012, 23.9); (2013, 25.0); (2014, 28.0)$
- b) In your own words, write the meaning of the ordered pair (2014, 28.0). *In the year 2014, 28 billion dollars was made in the worldwide box office.*
- c) Create a scatterplot of the paired data. Be sure to label the axes appropriately and title the graph.
- d) What trend in the paired data does the scatter diagram show?



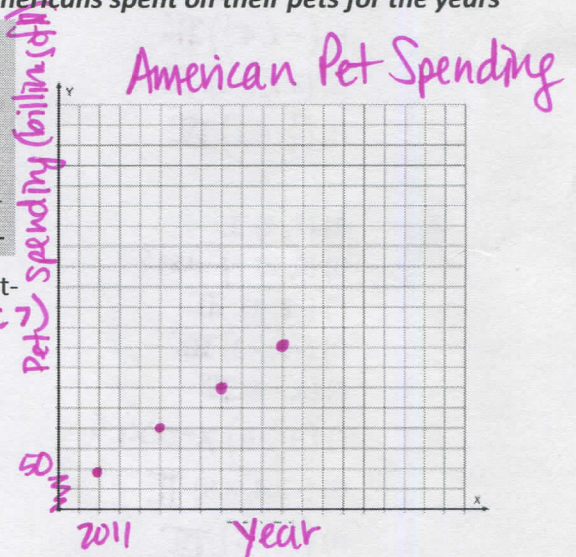
The ww boxoffice increased every year

18. The table shows the amount of money (in billions of dollars) Americans spent on their pets for the years shown.



Year	Pet-Related Expenditures (in billions of dollars)
2011	51.0
2012	53.3
2013	55.7
2014	58.5

- a) Write this paired data as a set of ordered pairs of the form (year, pet-related expenditures). $(2011, 51.0); (2012, 53.3); (2013, 55.7); (2014, 58.5)$
- b) In your own words, write the meaning of the ordered pair (2014, 58.5). *In 2014, Americans spent 58.5 billion dollars on their pets.*
- c) Create a scatter diagram of the paired data. Be sure to label the axes and title the graph.
- d) What trend in the paired data does the scatter diagram show?



pet-related expenditures increased every year.

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.

