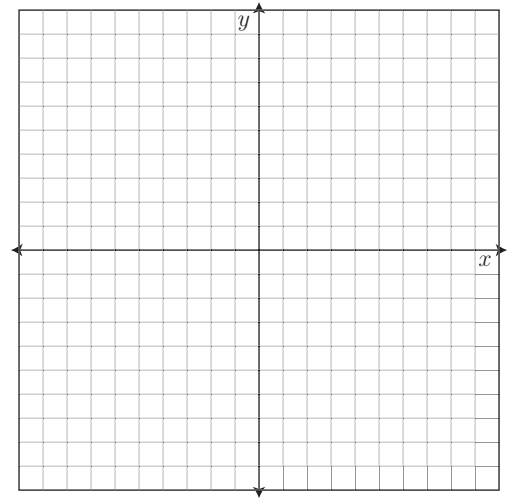


Show all relevant work!

1. Sketch a number line showing the negative integers between  $-5$  and  $3$ .

2. Let  $n$  be the number (in millions) of skateboarders in the United States at  $t$  years since 2000. What does the ordered pair  $(9, 13)$  mean in this situation?

3. Plot the points  $(-4, -5)$  and  $(7, 6)$  and draw a line through the two points. Estimate the coordinates of the  $x$  and  $y$  intercepts of the line.



4. Let  $v$  be the value (in thousands of dollars) of a car when it is  $t$  years old. Some pairs of values of  $t$  and  $v$  are listed in the table.

Ages and Values of a Car	
$t$ (years)	$v$ (thousands of dollars)
1	18
3	14
5	10
7	6
9	2

- (a) Create a scattergram of the data. Then draw a linear model.
- (b) Estimate the age of the car when it is worth \$4 thousand. \_\_\_\_\_
- (c) Estimate the value of the car when it is 6 years old. \_\_\_\_\_
- (d) What is the  $v$ -intercept of the model? \_\_\_\_\_  
What does it mean in this situation?
- (e) What is the  $t$ -intercept of the model? \_\_\_\_\_  
What does it mean in this situation?

