

Don't forget to assess yourself!

Name: \_\_\_\_\_ Hour: \_\_\_\_\_

A-REI.10 Understand that the graph of an equation in two variables is the set of all its solutions plotted in the coordinate plane, often forming a curve (which could be a line).

/4

Directions: Graph your situation on the coordinate plane. Label the axes.

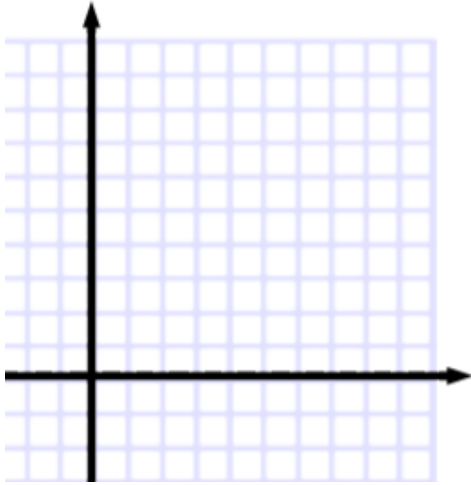


Figure 1



Figure 2

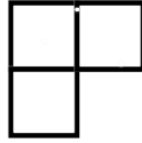


Figure 3

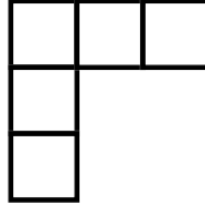
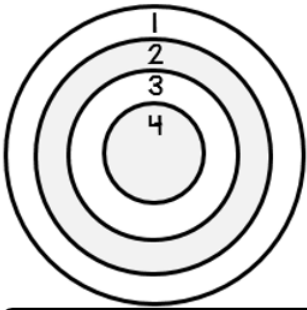
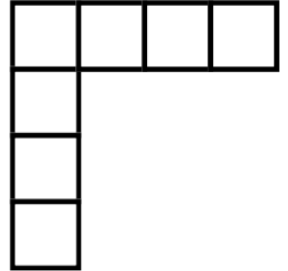


Figure 4



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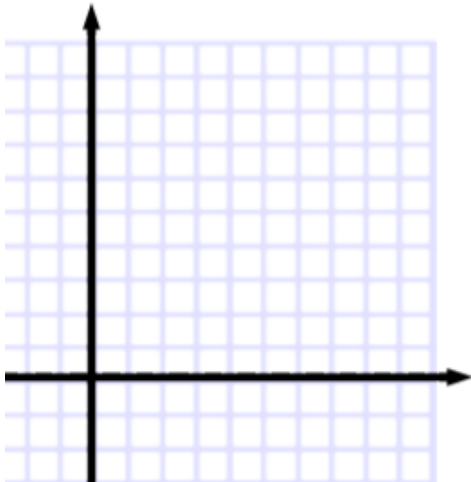


Figure 1



Figure 2

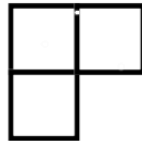


Figure 3

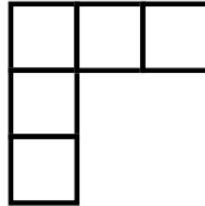
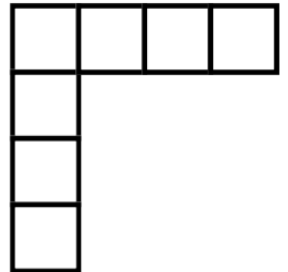


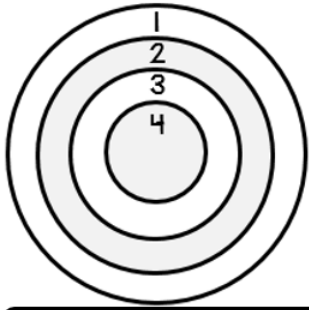
Figure 4



Name: \_\_\_\_\_ Hour: \_\_\_\_\_

F-IF-1 Understand that a function from one set to another set assigns to each element of the domain exactly one element of the range

/4



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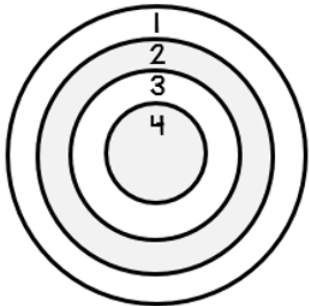
Directions: Write a function rule for the table and find the missing value.

| Domain | Range |
|--------|-------|
| 3      | 5     |
| 8      | 15    |
|        | 21    |
| 21     |       |

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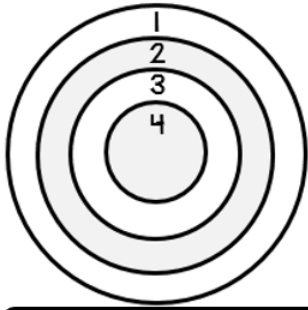
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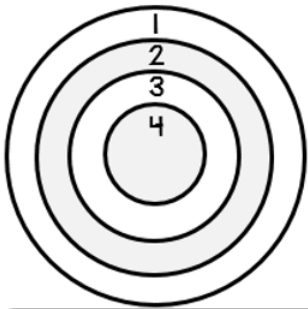
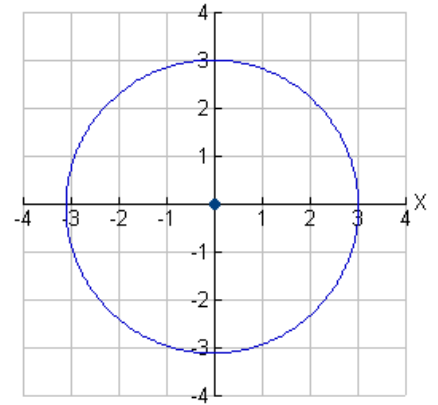
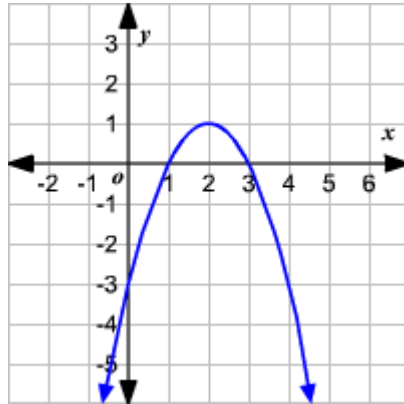
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F-IF.2 Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.

/4

**Directions:** Identify the domain and range for the function. Use function notation.



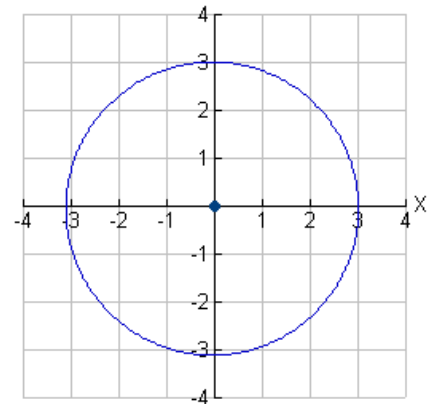
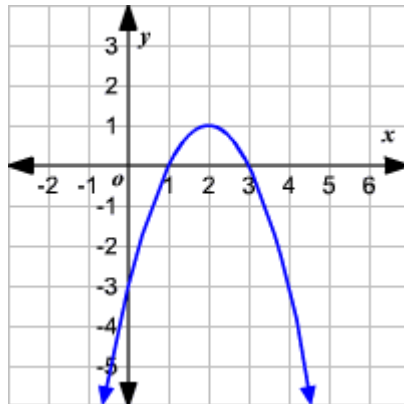
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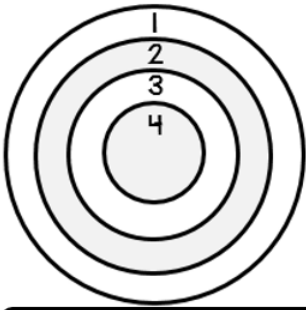
**Directions:** Identify the domain and range for the function. Use function notation.



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F-IF.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.

/4



Don't forget to assess yourself!

**Directions:** Sketch and label a graph of one home run. Include units on your axes. Then identify which variable is the independent variable and which is the dependent variable.

Carson was playing baseball on the Warriors and hit a home run! At the highest point, the ball was 20ft in the air and the ball landed on the ground in 15 seconds.

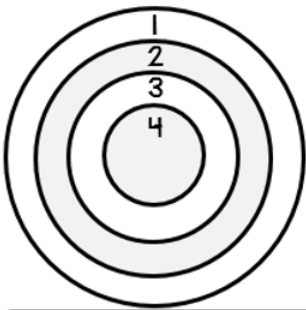
Independent variable:

Dependent variable:

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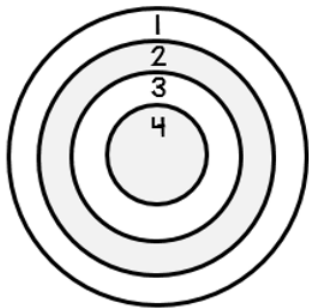
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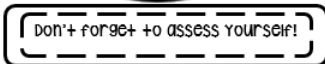


Name: \_\_\_\_\_ Hour: \_\_\_\_\_

F-IF-5 Relate the domain of a function to its graph and to the quantitative relationship it describes.

/4

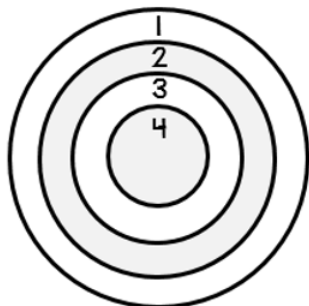
**Directions: Determine the domain of the situations.**



What is the domain of people they can add or remove from the world?

1.) Aliens land on Planet Earth and estimate a total of 7 billion people in the world. They can choose to help humans double the world population or destroy everyone on the planet.

2.) Your cell phone plan charges you \$0.20 for each text message you send. Your parents put a cap of \$50 on your texting bill every month. If  $c(t) = 0.2t$  is the cost of the total number of texts you send per month  $t$ , what is the domain of the function?

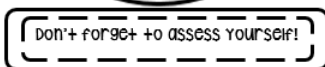


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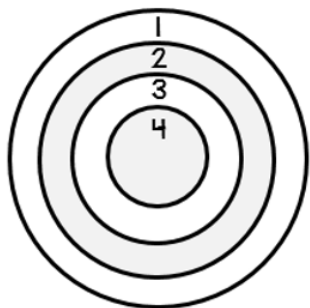
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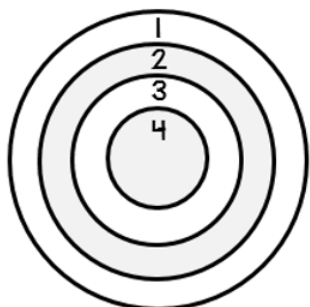
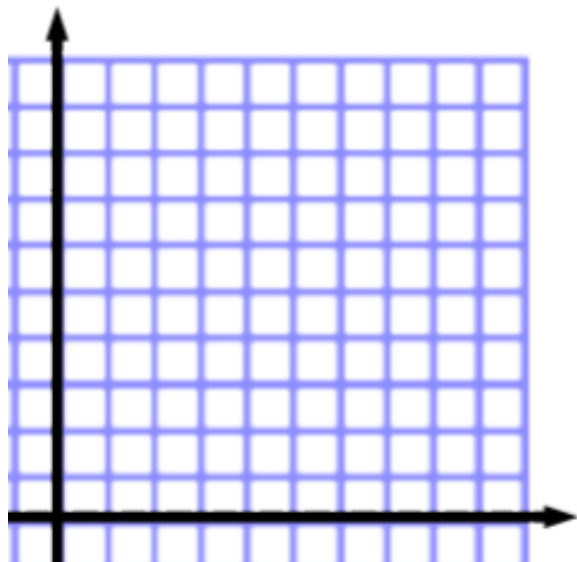
F-IF-7b Graph square root, cube root, and piecewise-defined functions, including step functions and absolute value functions.

/4

Mrs. Poulos needs a babysitter. She will pay \$10 an hour or part of an hour for her two kids. This means if she needs a babysitter for an hour and a half, she will pay for two hours. Graph the function, label the axes, and answer the questions that follow.

1.) Sam babysat for 3.5 hours, what did Mrs. Poulos pay him? Justify your answer.

2.) Sydney spent four hours and five minutes babysitting, what did she get paid? Justify your answer.



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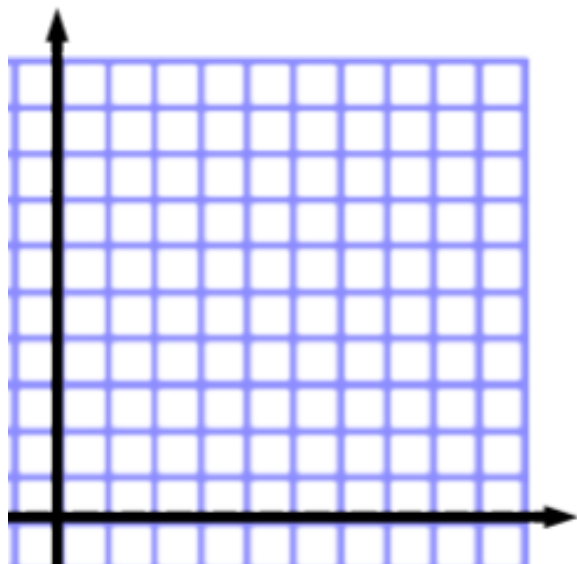
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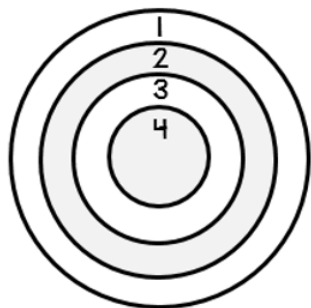
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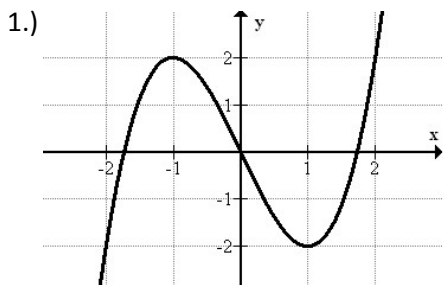
F-IF-7a Graph linear functions and show intercepts, maxima, and minima.

/4



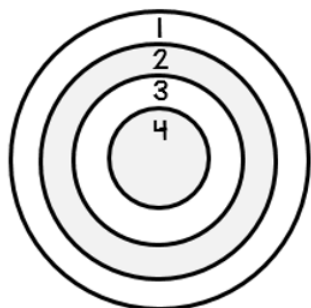
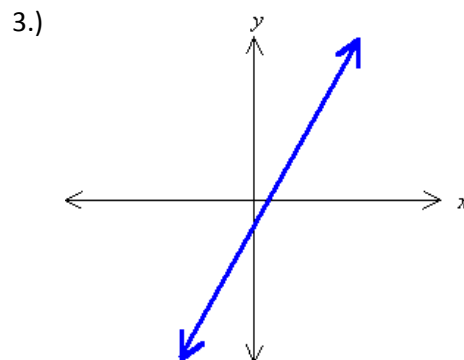
Directions: Determine if the situation is a function or not. Explain how you know.

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2.)

| X | Y |
|---|---|
| 4 | 5 |
| 4 | 6 |
| 5 | 7 |
| 6 | 7 |



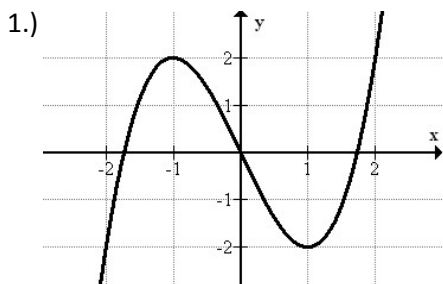
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