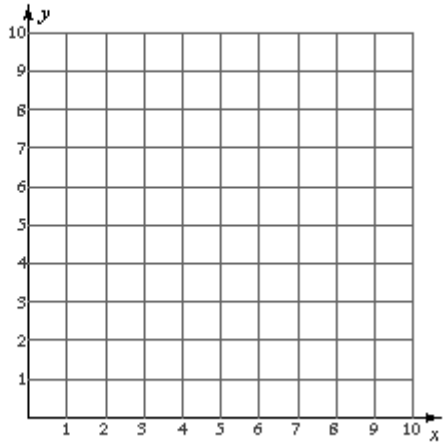
NAME:_____

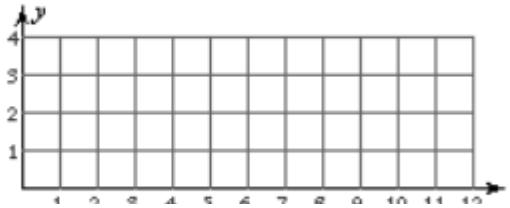
# 1.4 Represent Functions as Graphs Notes

Table | Ordered Pairs | Graph

| | |
|---|---|
| | |
| | |
| | |
| | |

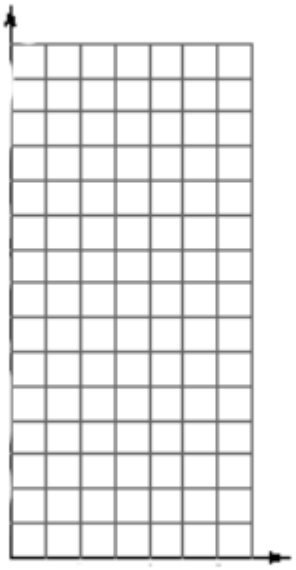



Graph the function $y = \frac{1}{4}x$ with the domain 0, 4, 8, 12.

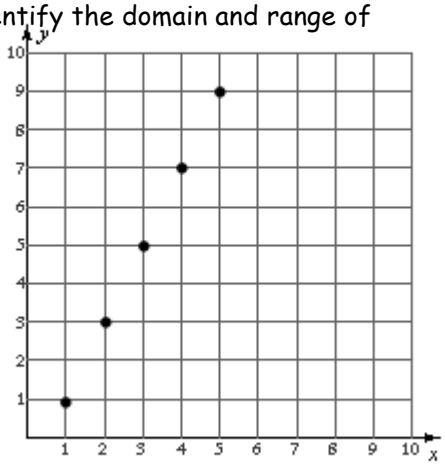


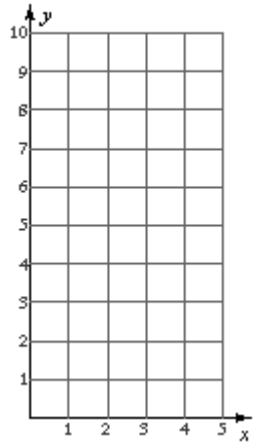

The table below shows the average score, m, on the mathematics section of the Terra Nova for BRK (Baumholder, Ramstein, Kaiserslautern) from 2006-2011 as a function of time, t, in years since 2006. Graph the function.

| Years since 2006, t | 0 | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Average Score, m | 68 | 73 | 74 | 77 | 78 | 82 |



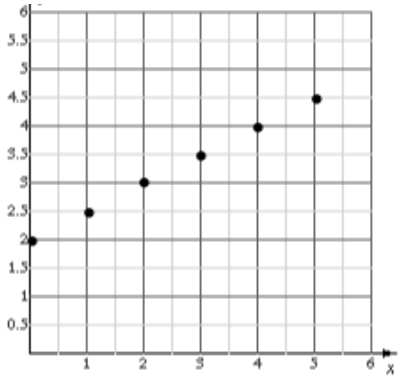
Make a rule for the function represented by the graph. Identify the domain and range of the function.





You try!

1) Graph y = 3x - 2 with the domain: 0, 1, 2, 3, 4.



2) Write a rule for the function.

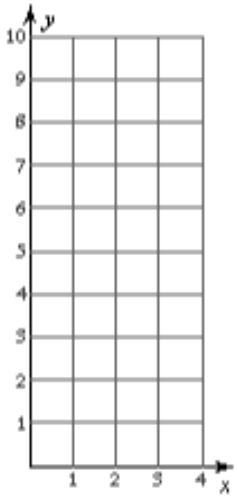
Summarize your notes:

## 1.4 Practice Problems

Graph the function.

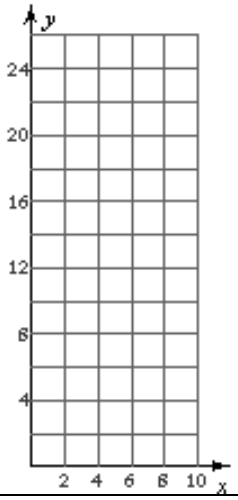
1) y = x + 3; domain:0,1,2,3, 4 and 5

| x | | | | | |
|---|---|---|---|---|---|
| y | | | | | |



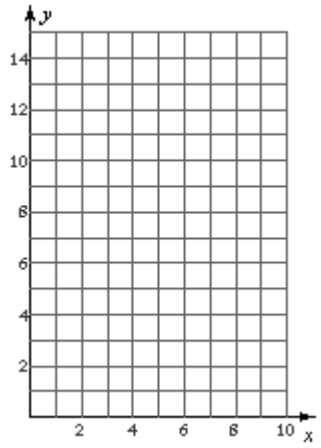
2) y=2x+2: domain: 0,2, 5, 7 and 10

| x | | | | | |
|---|---|---|---|---|---|
| y | | | | | |

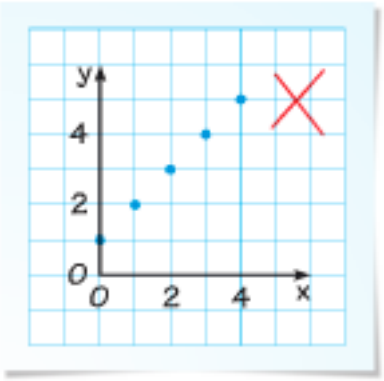


3) Y = x + 5; domain: 0, 2, 4, 6, 8, 10

| x | | | | | |
|---|---|---|---|---|---|
| y | | | | | |

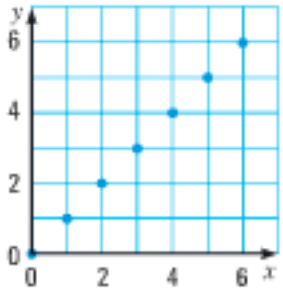



4) Describe and correct the error in graphing the function y = x -1 with domain 1, 2, 3, 4, 5.

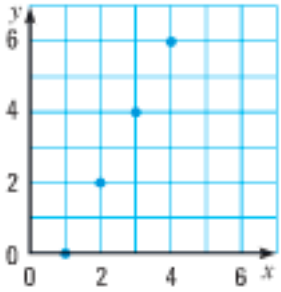



Write a rule for the function represented by the graph. Identify the domain and the range of the function.

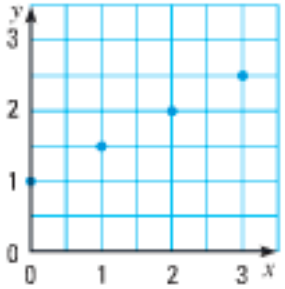
5)




6)



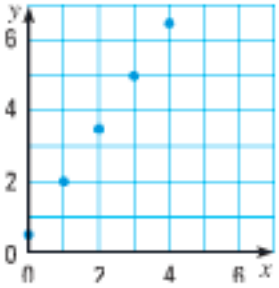

7)




8) MULTIPLE CHOICE: The graph of which function is shown?

(A) $y = \frac{1}{2}x + \frac{1}{2}$ (B) $y = x + \frac{1}{2}$

(C) $y = \frac{3}{2}x + \frac{1}{2}$ (D) $y = 2x + \frac{1}{2}$




QUICK REVIEW

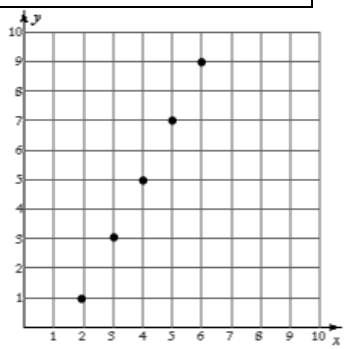
1) $\frac{6}{13} + \frac{4}{13}$

2) $\frac{6}{11}\left(\frac{5}{6}\right)$

3) Find the Greatest Common:
42, 56

1.4 Application

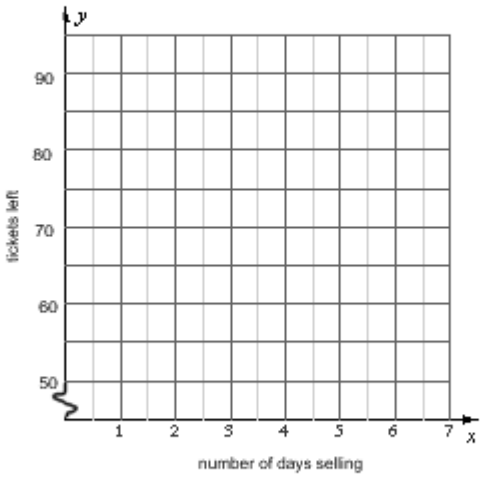
1) Find the domain and range of graph. 2) Write a rule for the function.



3) Did you hear that Justin Bieber is coming to play Hanger 2 at Ramstein? He only wants to play for the best students in the BRK area. The table below represents the amount of tickets that are left to be sold as a function of days selling.

| Days sold, x | 0 | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|---|
| Tickets left, y | 90 | 82 | 74 | 66 | 58 | 50 |

a) Graph the function.




b) Describe how the number of tickets left changes as the number days selling increases.

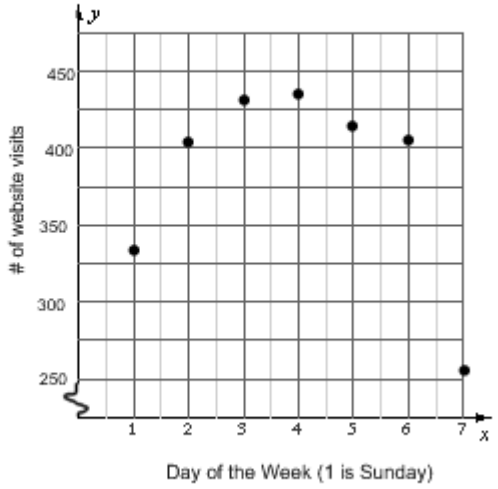
c) Would it be reasonable to expect that there would be 34 tickets left after 7 days selling? EXPLAIN!

d) Write a rule for the function.

4) The graph at the right represents the number of visits to www.myalgebra.weebly.com for the last week. Day 1 represents Sunday, Day 2 represents Monday and so on.

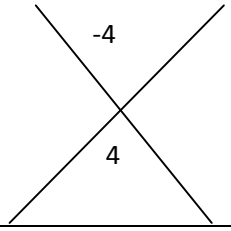
a) Describe how the number of visits to the websites changes over the course of the week.

b) Why would Day 7 be so different from the other days?

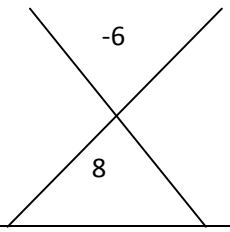



Coming up…MAGIC X. (What two numbers add to the top # and multiply to the bottom #?)

1)




2)




3)