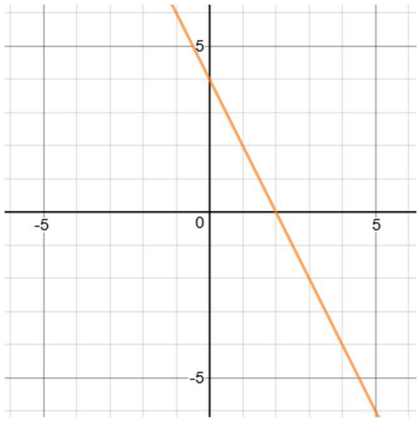
Unit 4 – Final Exam Review

1. Determine the domain and range of each relation, in both set notation and interval notation if appropiate.

a)

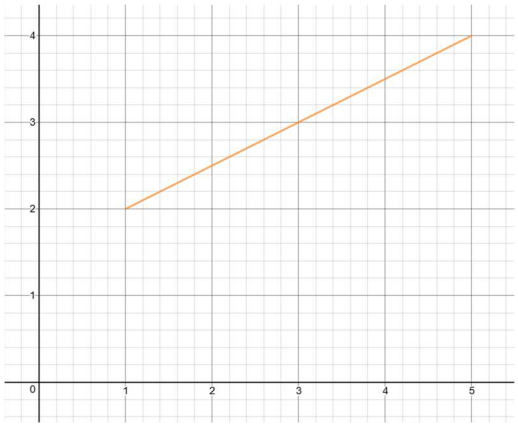


Domain: _____

Range: _____

Function: Yes No

b)

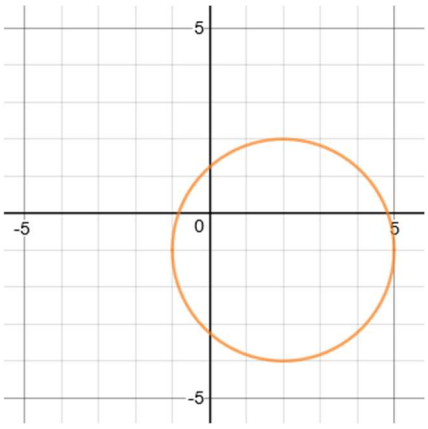


Domain: _____

Range: _____

Function: Yes No

c)

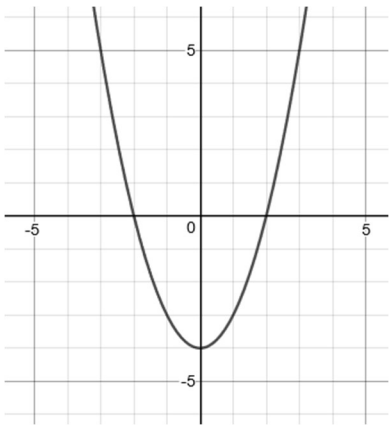


Domain: _____

Range: _____

Function: Yes No

d)



Domain: _____

Range: _____

Function: Yes No

e) { (0 , 5) , (-3 , 4) , (7 , 1) , (2 , 8) , (7 , 3) }

Domain: _____

Range: _____

Function: Yes No

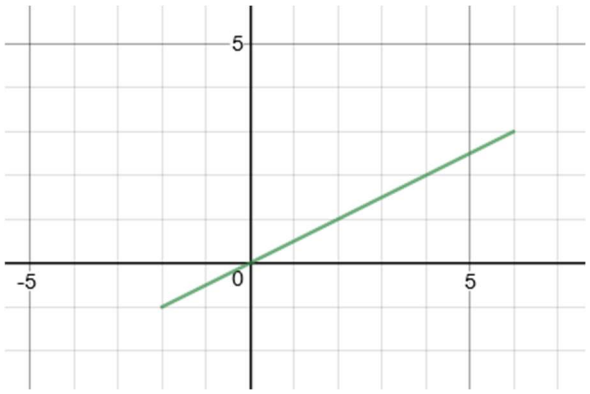
f) { (-4 , 6) , (2 , 5) , (0 , -9) , (-11 , 6) }

Domain: _____

Range: _____

Function: Yes No

g)

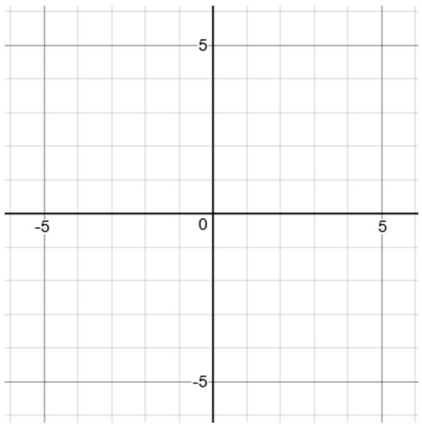


Domain: _____

Range: _____

Function: Yes No

h)

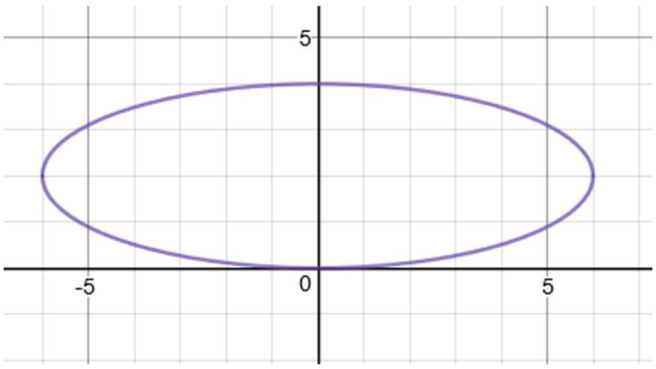


Domain: _____

Range: _____

Function: Yes No

i)

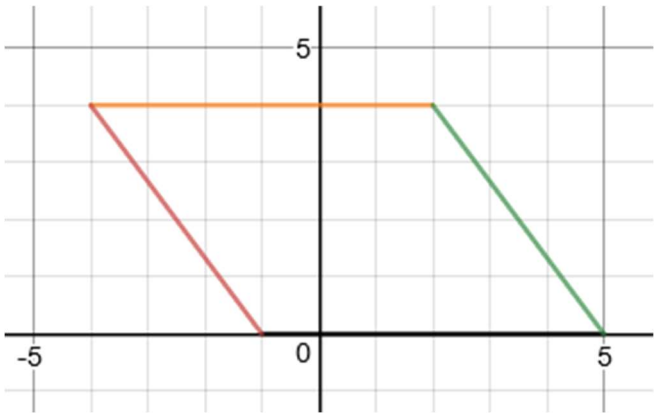


Domain: _____

Range: _____

Function: Yes No

j)



Domain: _____

Range: _____

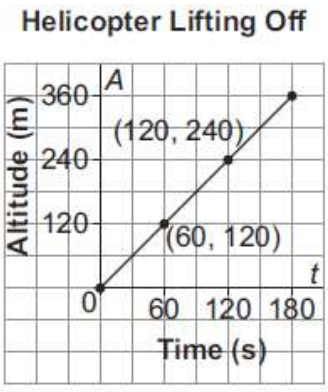
Function: Yes No

2. Determine the rate of change for each linear relation.

a)

Time (s)	Distance (m)
0	18
2	24
4	30
6	36
8	42

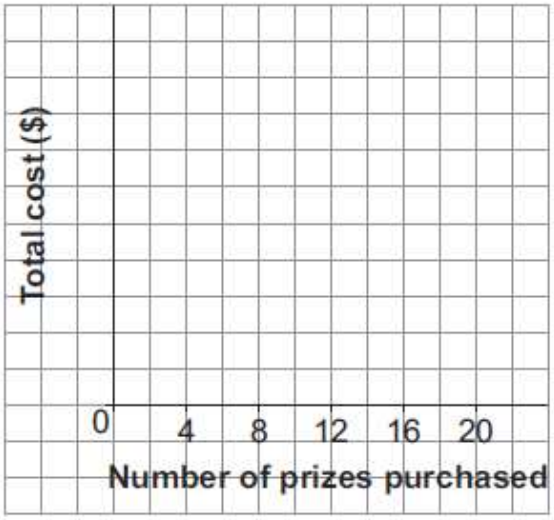
b)



3. This table shows the cost of prizes for a school carnival.

a) Make a graph for this relation. Choose an appropriate scale.

Number of Prizes	Total Cost ($)
1	6.00
2	12.00
6	24.00
12	42.00
20	60.00



b) Can you connect the points?
Justify your answer

c) Is the relation a function?

d) State the domain and range.

4. Which table of values represents a linear relation?

a)

Time (s)	Distance (m)
0	0
1	1
2	2
3	4
4	8

b)

Time (s)	Distance (m)
0	0
1	5
2	10
3	15
4	20

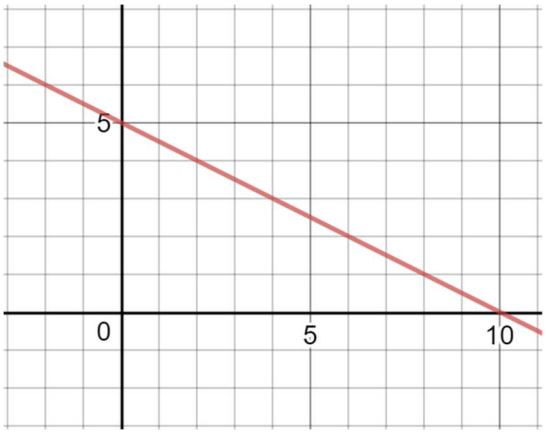
5. Given the function $f(x) = -4x + 3$. Determine $f(-5)$.

6. Given the function $g(n) = n^2 - 3n + 8$. Determine $g(-2)$.

7. Given the function $f(n) = 3 - 8n$. Determine the value of n when $f(n) = -85$.

8. Given the function $f(x) = 5x - 6$. Determine the value of x when $f(x) = -41$

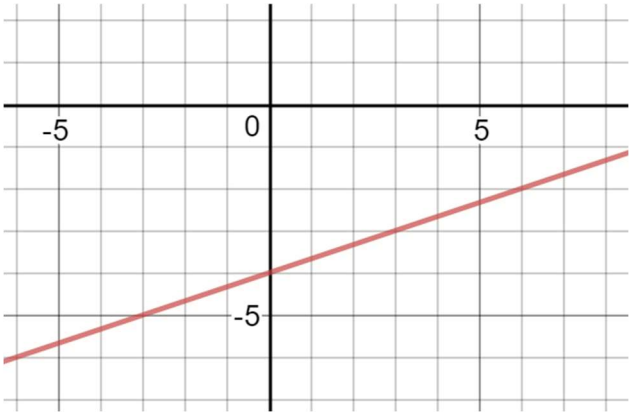
9. Given the graph of the function:



a) Determine the value of the domain when the value of the range is 6.

b) Determine the value of the range when the value of the domain is 8.

10. Given the graph of the function:



a) Determine the value of the domain when the value of the range is -5

b) Determine the value of the range when the value of the domain is 6.