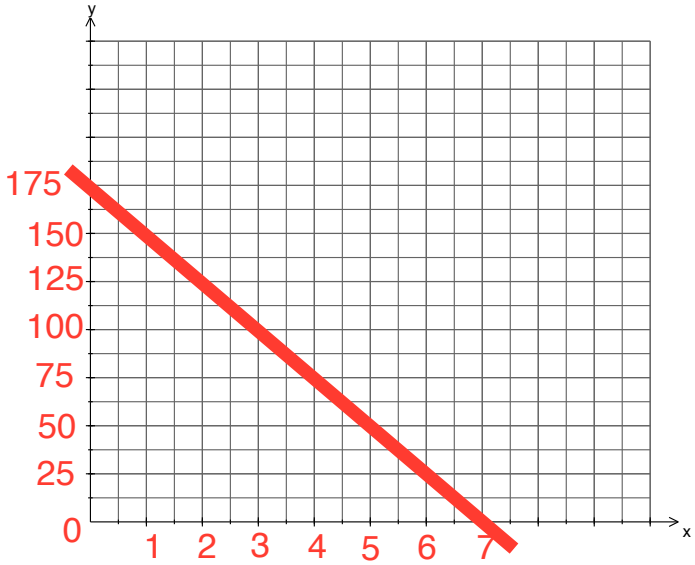
Math 4 SN – Properties of Linear Functions Name: Answers

For each of the following table of values or equations:

- graph the relation (connect the points given) using the indicated domain.
- determine the properties for each graph
- given the table, determine the rule OR given the rule, fill in the table

1)

x	*y*
1	150
3	100
5	50
6	25

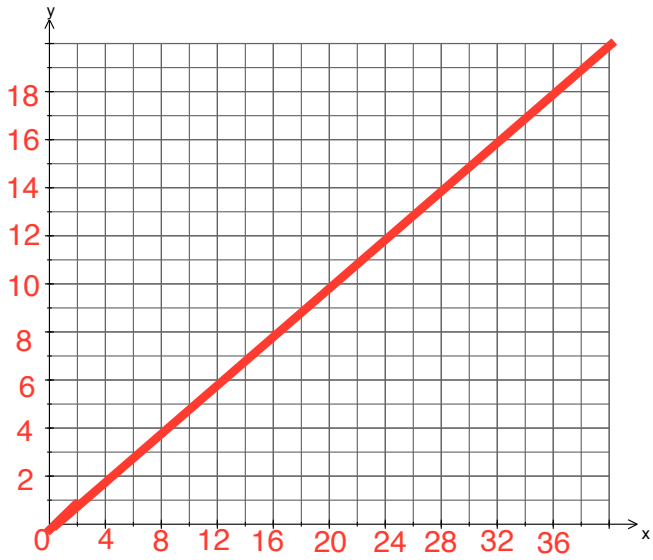


Determine the Rule: y = -25x + 175

Domain:	$\mathbb{R}$
Range:	R
Maximum:	Ø
Minimum:	Ø
Initial value (y-intercept):	{175}
zero(s)/ x-intercepts:	{7}
Positive:	]-infinity, 7]
Negative:	[7, infinity [
Increasing:	Ø
Decreasing:	R

2)

x	*y*
0	0
2	1
16	8
24	12
30	15
34	17

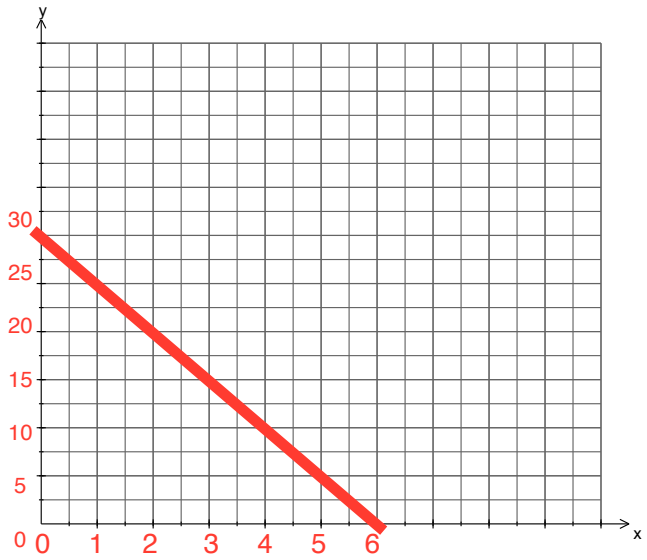


Determine the rule: y = (1/2)x

Domain:	$\mathbb{R}$
Range:	R
Maximum:	Ø
Minimum:	Ø
Initial value (y-intercept):	{0}
zero(s)/ x-intercepts:	{0}
Positive:	[0, infinity[
Negative:	] - infinity, 0]
Increasing:	R
Decreasing:	Ø

3) Graph $y = -5x + 30$

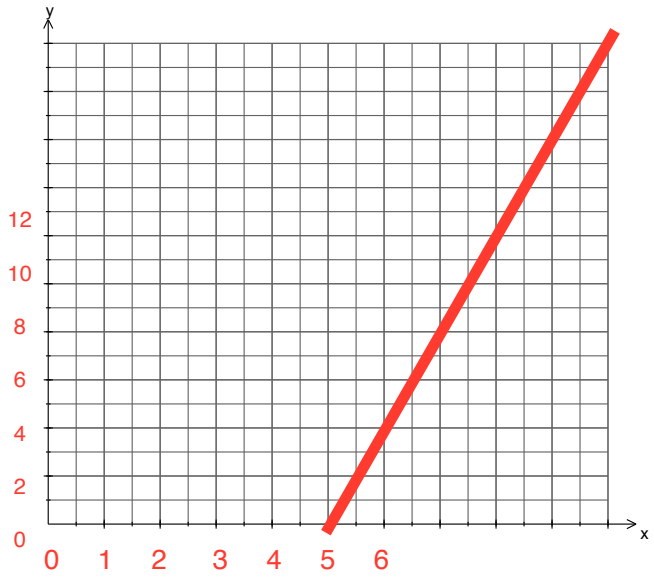
x	y
0	30
1	25
2	20
3	15
4	10
5	5
6	0



Domain:	$\mathbb{R}$
Range:	R
Maximum:	Ø
Minimum:	Ø
Initial value (y-intercept):	{30}
zero(s)/ x-intercepts:	{6}
Positive:	] - infinity, 6]
Negative:	[6, infinity [
Increasing:	Ø
Decreasing:	R

4) Graph $y = 4x - 20$

x	y
0	-20
1	-16
2	-12
3	-8
4	-4
5	0
6	4



Domain:	$\mathbb{R}$
Range:	R
Maximum:	Ø
Minimum:	Ø
Initial value (y-intercept):	{-20}
zero(s)/ x-intercepts:	{5}
Positive:	[5, infinity [
Negative:	] -infinity, 5]
Increasing:	R
Decreasing:	Ø