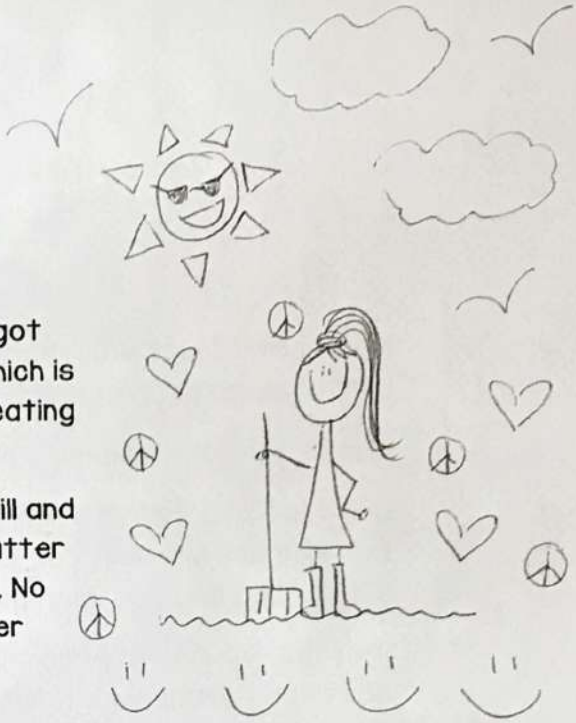
Hey Everyone!

Greetings from my isolation world to yours.

Hoping this letter finds you happy and healthy.

I hope you have enjoyed the sunshine this week. I got the chance to start working my garden outside, which is my happy place. Working in the garden under the beating sun, covered in mud, is where I am at peace.



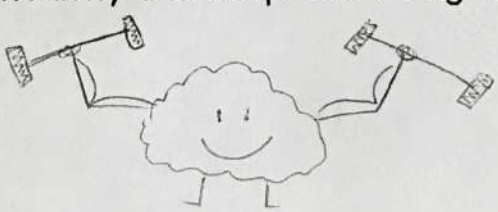
I admire people with large gardens who plant and till and weed with class and elegance. This is not me. No matter what I am doing, it ends up with me covered in dirt. No Martha Stewart poised sophisticated gardener over here. My style is a bit more messy old man stinky farmer.

I hope you are finding your happy place where you are finding peace. Maybe this is going for a walk by your homes, or quadding the trails, or deep in a good book.

It takes practice and time to be good at making sure your days are filled with things that bring you joy. Right now we have time to practice this, and I hope you are improving this skill!

This week is Mental Health Awareness Week. www.mentalhealthweek.ca has lots of good resources and supports if you are interested! Remember, as always, all of us at the school are available and ready to chat with you whenever you need. If you ever want to reach out to your teachers, or Mrs. Borlase, Melissa, Mr. Otter, Mr. Whelan or any other supports you can! You can find their contact info at the school website.

Missing you. Stay happy and healthy and keep exercising that brain!



Ms. Burns

9 Math

Hey crew. BIG HIGH FIVES GOING TO YOU!!

This is a very challenging course. And I know this can lead to frustration.

Don't let this frustration win! Whatever you participate in while at home will help you in the future. We will make sure that you are supported and get all gaps filled in September.

Work at your own pace. Find a good balance for yourself. Ask lots of questions. I am here for you.

This week's checklist:

- ☐ U5 Booklet 1
- ☐ U5A1

As always, do not start this unless you have finished the other packages. If you are still on wayyyyyyy earlier packages, start there!

I miss you tons.

It frustrates me beyond belief that we have to be learning this way. I know it is far from ideal.

Keep doing the best you can, and keep yourself happy and healthy!

9 math

Unit 5

Linear Relations

booklet 1

May 5th - May 12th

Name:_____

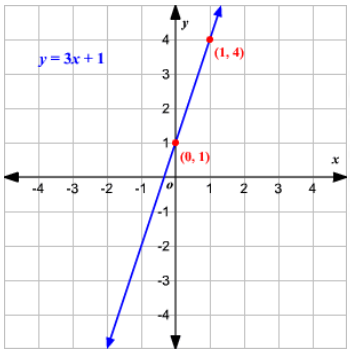
This unit is all about LINES.

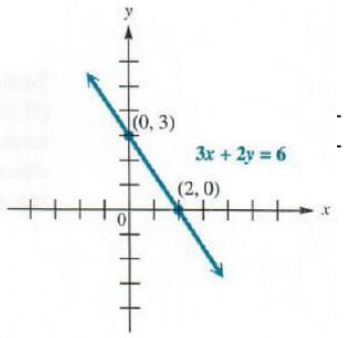
Linear means "along a straight line".

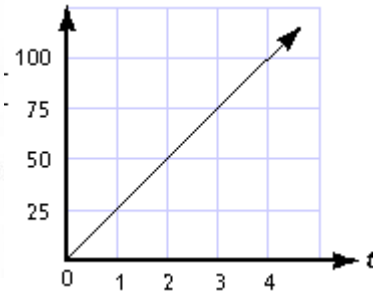
Relation mean "the relationship between values". In our case, this means the relationship between x and y.

Therefore, the "Linear Relations" unit is the study of equations, ordered pairs and the graphing of values that produce lines.

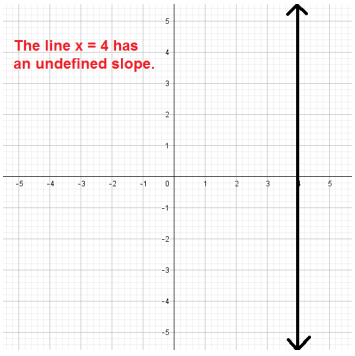
Our graphs will look something like this...

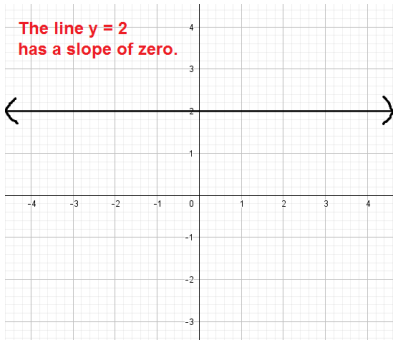




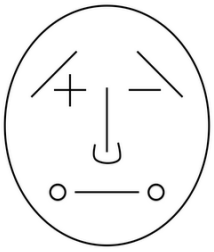


Or this...





And you will also meet a new friend named Slope Dude:



You will see what he does later...

But first we start with Input / Output tables.

These should be familiar to you from your previous years as a math superstar.

Each table has a RULE.

The rules tell you what TO DO to the input in order to get the output.

For example:

Here, the RULE is +3...

input x	+ 3	output y
3		6
7		10
12		15

Sometimes you need to find the rule.

1. Figure out a rule that works for ONE of the pairs.
2. Test if it works for the others
   a) If it works - HOORAY! That is the rule.
   b) If it does not - try a different rule!

Find the rule from the given table.

In	Out
3	2
6	5
9	8
1	0

A. Subtract 2

B. Subtract 1

Name: _____

In and Out Boxes

a.

In	Out
6	
9	
15	
	22

rule: add 4

b.

In	Out
5	2
7	
	9
	13

rule:

c.

In	Out
9	14
14	
21	
	30

rule:

d.

In	8	13	19	
Out				21

rule: subtract 7

e.

In	9	15		
Out	3		12	18

rule:

f. Kris and Pat were born on the exact same day, but not in the same year. Their ages are shown in the table.

Age in Years

Kris' Age	4	7	12	15	**?**	23
Pat's Age	7	10	15	**?**	22	26

When Kris was 15, how old was Pat? _____

When Pat was 22, how old was Kris? _____

When Pat was 30, how old was Kris? _____

Which choice best explains the rule for this table? (Circle one)

a. Add three to Kris' age to find Pat's age.
b. Add three to Pat's age to find Kris' age.
c. Subtract three from Kris' age to find Pat's age.
d. Subtract three from the sum of Pat and Kris' age to find Pat's age.

ANSWER KEY

In and Out Boxes

a.

In	Out
6	**10**
9	**13**
15	**19**
18	22

rule: add 4

b.

In	Out
5	2
7	**4**
12	9
16	13

rule: **subtract 3**

c.

In	Out
9	14
14	**19**
21	**26**
25	30

rule: **add 5**

d.

In	8	13	19	**28**
Out	**1**	**6**	**12**	21

rule: subtract 7

e.

In	9	15	**18**	**24**
Out	3	**9**	12	18

rule: **subtract 6**

f. Kris and Pat were born on the exact same day, but not in the same year. Their ages are shown in the table.

Age in Years

Kris' Age	4	7	12	15	**19**	23
Pat's Age	7	10	15	**18**	22	26

When Kris was 15, how old was Pat? **18**

When Pat was 22, how old was Kris? **19**

When Pat was 30, how old was Kris? **27**

Which choice best explains the rule for this table? (Circle one)

a. **Add three to Kris' age to find Pat's age.**
b. Add three to Pat's age to find Kris' age.
c. Subtract three from Kris' age to find Pat's age.
d. Subtract three from the sum of Pat and Kris' age to find Pat's age.

Name: _____

In and Out Boxes

a.

In	Out
7	
9	
14	
	21

rule: add 6

b.

In	Out
2	4
6	12
7	
	18

rule:

c.

In	Out
9	2
12	5
18	
	20

rule:

d.

In	18		42	
Out		5		9

rule: divide by 6

e.

In	6	9		
Out	5	8	13	19

rule:

e. Sam made up a new game in which players throw a Frisbee into a hockey net. The table below shows the number of points earned for each goal.

Points in Frisbee Hockey

Number of Goals	1	2	3	4	5
Total Points	8	16	24	**?**	40

When 4 goals are scored, how many points are earned? _____

When 10 goals are scored, how many points are earned? _____

Leroy thinks that his team will earn 76 points if his team makes 9 goals. Tell whether or not he is correct and explain your answer.

_____

_____

_____

_____

ANSWER KEY

In and Out Boxes

a.

In	Out
7	**13**
9	**15**
14	**20**
15	21

rule: add 6

b.

In	Out
2	4
6	12
7	**14**
9	18

rule: **multiply by 2**

c.

In	Out
9	2
12	5
18	**11**
27	20

rule: **subtract 7**

d.

In	18	**30**	42	**54**
Out	**3**	5	**7**	9

rule: divide by 6

e.

In	6	9	**14**	**20**
Out	5	8	13	19

rule: **subtract 1**

e. Sam made up a new game in which players throw a Frisbee into a hockey net. The table below shows the number of points earned for each goal.

Points in Frisbee Hockey

Number of Goals	1	2	3	4	5
Total Points	8	16	24	**32**	40

When 4 goals are scored, how many points are earned? **32**

When 10 goals are scored, how many points are earned? **80**

Leroy thinks that his team will earn 76 points if his team makes 9 goals. Tell whether or not he is correct and explain your answer.

Leroy is incorrect. To find the total points, you need to multiply by 8. If he makes 9 goals, he would have 72 points.

Name: _____

Input and Output Tables

Complete the tables.

a.

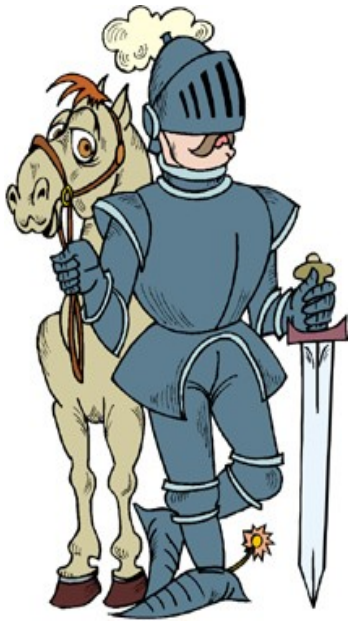
Input	Output
2	2.5
3.5	4
6	
8.5	
	9.5
	13

rule: add .5

b.

Input	Output
0.25	0.5
2	2.25
4.5	
6.75	
	8.5
	9.75

rule: add .25



c.

Input	1	5.25	7.5	
Output	1.75	6		10

rule:

d.

Input	1.5		6.5	9
Output	2.5	5.5		10

rule:

Complete the table and answer the questions.

e.

Input	Output
0¢	
50¢	$1.25
$3.50	$4.25
$5.25	
	$8.00
$9.50	
$12.75	

What is the rule for this table? _____

Explain how you found the rule.

_____

_____

_____

_____

_____

ANSWER KEY

Input and Output Tables

Complete the tables.

a.

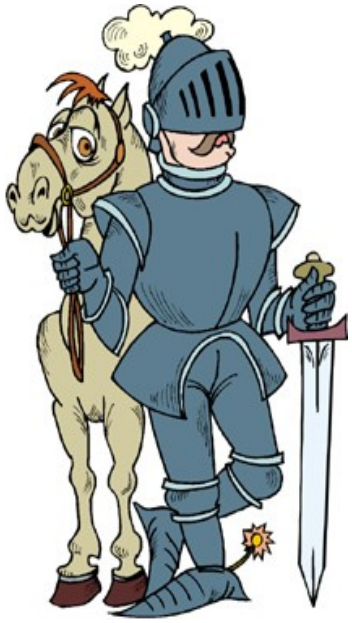
Input	Output
2	2.5
3.5	4
6	**6.5**
8.5	**9**
9	9.5
12.5	13

rule: add .5

b.

Input	Output
0.25	0.5
2	2.25
4.5	**4.75**
6.75	**7**
8.25	8.5
9.5	9.75

rule: add .25



c.

Input	1	5.25	7.5	**9.25**
Output	1.75	6	**8.25**	10

rule: **add .75**

d.

Input	1.5	**4.5**	6.5	9
Output	2.5	5.5	**5.5**	10

rule: **add 1**

Complete the table and answer the questions.

e.

Input	Output
0¢	**75¢**
50¢	$1.25
$3.50	$4.25
$5.25	**$6.00**
$7.25	$8.00
$9.50	**$10.25**
$12.75	**$13.50**

What is the rule for this table? **add 75¢**

Explain how you found the rule.

Subtract 50¢ from $1.25 to get 75¢. This is the amount that is added to each input to get the output.