



Name

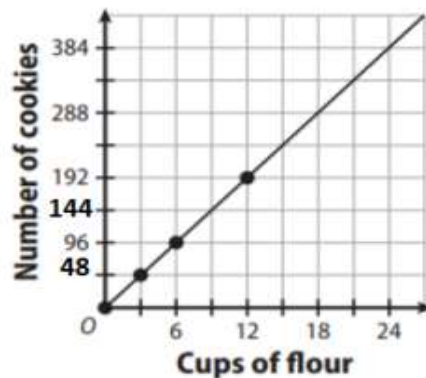
Gr. / 8A

Subject/ Math.

Revision sheet

L.3-1 "Representing Proportional Relationships"**Q1) Solve:**

1) The graph shows the relationship between the number of cups of flour and the number of cookies made. Write an equation for the proportional relationship.

**Answer:**

Cups of flour (x)			
Number of cookies (y)			

2) The table shows a proportional relationship. Write an equation that describes the relationship.

Hours	1	2	3	4
Calories burned	225	450	675	900

Answer:

L.3.2" Rate of Change and Slope"

Q1) Chose the correct answer: -

1)The table represents the number of computer tablets sold. Tell whether the rates of change are constant or variable.

Week	1	3	4	8
Number sold	32	96	128	224

a) Constant

b) variable

Q2) Solve:

The table shows the prices for various electronics during a storewide sale. Each item has the same percent discount. find the slope of the line connecting the points.

Item	Tablet Computer	Disk Player	32-inch TV	Smart-phone
Original price (\$)	350	375	400	200
Sale price (\$)	280	300	320	160

Answer:

1) Find the constant of proportionality for the table of values.

x	2	3	4	5
y	3	4.5	6	7.5

Answer:

L.3-3 "Interpreting the Unit Rate as Slope"

Choose the correct answer: -

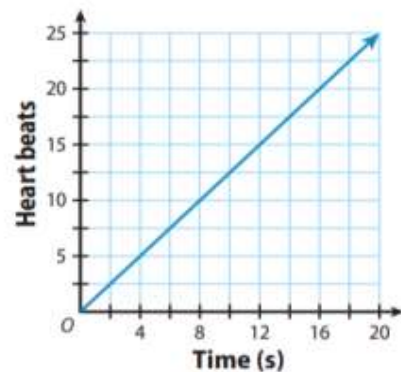
1) The table represent the rate at machines A is bottling milk in gallons per second. And the equation $y = \frac{3}{4}x$ represent the rate at machines B is bottling milk in gallons per second. Determine which machine is working at a faster rate.

Time(s)	1	2	3
Amount(gal)	0.6	1.2	1.8

- a) machine A b) machine B c) they are the same

Q2) Solve:

1) The equation $y = 1.2x$ represents the rate, in beats per second, that Lee's heart beats. The graph represents the rate that Nancy's heart beats. Determine whose heart is beating at a faster rate.



Answer:

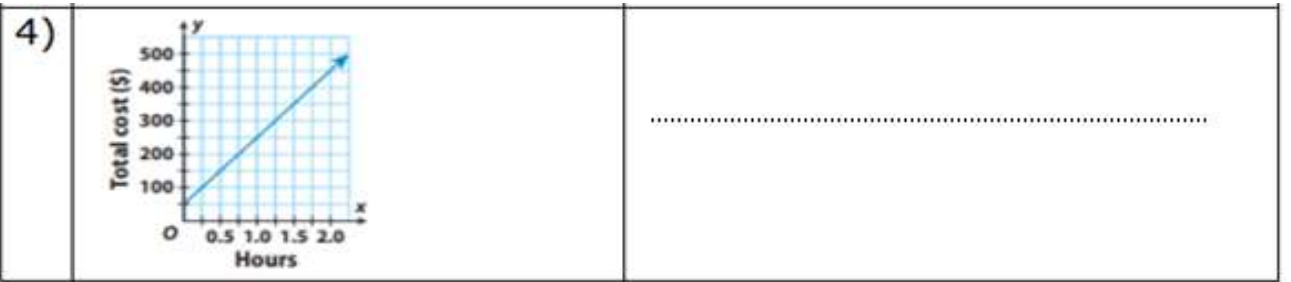
L-4.1 "Representing linear Nonproportional relationships"

1) Does the table represent a proportional or a nonproportional linear relationship?

1)	<table border="1"> <tbody> <tr> <td>x</td> <td>0</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> </tr> <tr> <td>y</td> <td>1</td> <td>7</td> <td>13</td> <td>19</td> <td>25</td> </tr> </tbody> </table>	x	0	2	4	6	8	y	1	7	13	19	25
x	0	2	4	6	8									
y	1	7	13	19	25									
2)	<table border="1"> <tbody> <tr> <td>x</td> <td>0</td> <td>5</td> <td>10</td> <td>15</td> <td>20</td> </tr> <tr> <td>y</td> <td>140</td> <td>120</td> <td>100</td> <td>80</td> <td>60</td> </tr> </tbody> </table>	x	0	5	10	15	20	y	140	120	100	80	60
x	0	5	10	15	20									
y	140	120	100	80	60									
3)	<table border="1"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>1</td> </tr> <tr> <td>40</td> <td>8</td> </tr> <tr> <td>65</td> <td>13</td> </tr> </tbody> </table>	x	y	5	1	40	8	65	13				
x	y													
5	1													
40	8													
65	13													
4)	<table border="1"> <tbody> <tr> <td>x</td> <td>0</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>y</td> <td>0</td> <td>4.5</td> <td>9</td> <td>13.5</td> </tr> </tbody> </table>	x	0	1	2	3	y	0	4.5	9	13.5		
x	0	1	2	3										
y	0	4.5	9	13.5										

2) Does the graph represent a proportional or a nonproportional linear relationship?

1)	
2)	<p style="text-align: center;">Driving Distance</p>



3) Which table is the values for the equation $y = x - 1$

a)

x	-8	0	8	16	24
y	-8	-5	-2	1	4

b)

x	0	2	4	6	8
y	3	7	11	15	19

c)

x	-2	-1	0	1	2
y	-3	-2	-1	0	1

4) The table shows a proportional relationship. What is the missing y-value?

x	y
5	1
40	8
65	?

- a) 16 b) 15 c) 13

L.4.2” Determining Slope and y-intercept

Q1) A large barrel that holds water is leaking. The table shows how much water is left after a specific number of minutes. Find and interpret the rate of change.

Minutes	5	10	15	20
Water (gal)	16	14	12	10

.....

Q2) Gregg deposits the money he makes from mowing lawns into his savings account, adding it to the money his father gave him to open the account. Confirm the relationship is linear and give the constant rate of change and the initial value.

Lawns mowed	5	10	15	20
Money saved (\$)	110	170	230	290

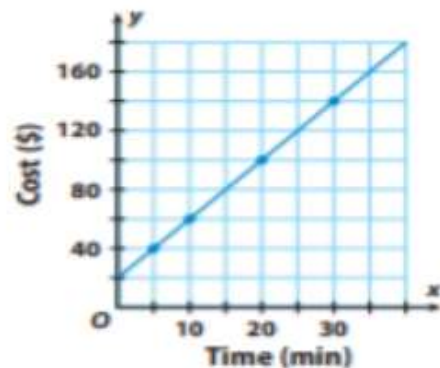
.....

Q3) What are the slope and y-intercept of the relationship shown in the table?

x	10,000	20,000	30,000
y	2,500	3,000	3,500

.....

Q4) What are the slope and y-intercept of the relationship shown in the graph?



.....

Q5) What are the slope and y-intercept of the relationship shown in the table?

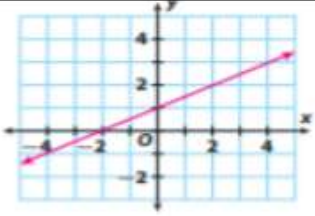
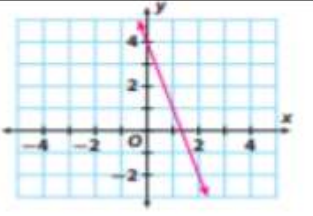
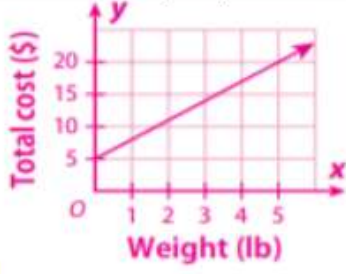
Hours (x)	Number of units (y)
2	480
15	3,600
24	5,760
30	7,200
48	11,520
55	13,200

.....

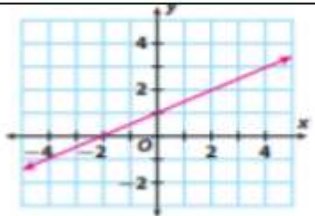
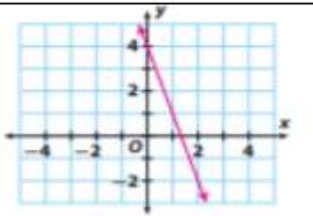
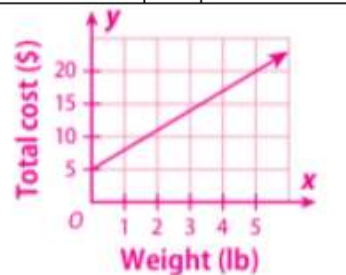
“L.4.3 Graphing Linear Nonproportional Relationships Using Slope and y-intercept”

Q1) which graph represents the equation:-

a) $y = \frac{1}{2}x + 1$

a) 	b) 
c) 	

b) $y = 3x + 5$

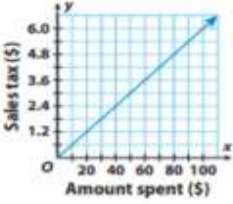
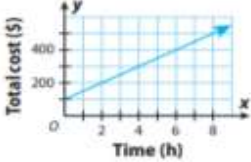
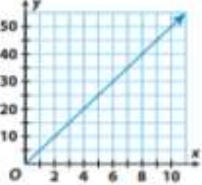
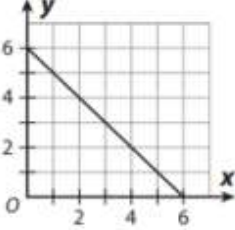
a) 	b) 
c) 	

“L.4.4 Proportional and Nonproportional Situations”

Q1) The change in a test score for each incorrect answer is represented by the equation $y = -\frac{x}{2}$, where x is the number of incorrect answers. Is the relationship between the number of incorrect answers and the change in score proportional or nonproportional?

.....

Q2) Determine if each relationship is a proportional or nonproportional situation. Explain your reasoning

<p>a)</p>  <p style="text-align: center;">Sales tax (\$)</p> <p style="text-align: center;">Amount spent (\$)</p>	<p>b)</p>  <p style="text-align: center;">Total cost (\$)</p> <p style="text-align: center;">Time (h)</p>																				
<p>c)</p>  <p style="text-align: center;">y</p> <p style="text-align: center;">x</p> <p>_____</p>	<p>d)</p>  <p style="text-align: center;">y</p> <p style="text-align: center;">x</p> <p>_____</p>																				
<p>e)</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tbody> <tr> <td style="padding: 2px 10px;">x</td> <td style="padding: 2px 10px;">0</td> <td style="padding: 2px 10px;">1</td> <td style="padding: 2px 10px;">2</td> <td style="padding: 2px 10px;">3</td> </tr> <tr> <td style="padding: 2px 10px;">y</td> <td style="padding: 2px 10px;">0</td> <td style="padding: 2px 10px;">4.5</td> <td style="padding: 2px 10px;">9</td> <td style="padding: 2px 10px;">13.5</td> </tr> </tbody> </table> <p>_____</p>	x	0	1	2	3	y	0	4.5	9	13.5	<p>f)</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"> <tbody> <tr> <td style="padding: 2px 10px;">x</td> <td style="padding: 2px 10px;">1</td> <td style="padding: 2px 10px;">2</td> <td style="padding: 2px 10px;">3</td> <td style="padding: 2px 10px;">4</td> </tr> <tr> <td style="padding: 2px 10px;">y</td> <td style="padding: 2px 10px;">4.5</td> <td style="padding: 2px 10px;">6.5</td> <td style="padding: 2px 10px;">8.5</td> <td style="padding: 2px 10px;">11.5</td> </tr> </tbody> </table> <p>_____</p>	x	1	2	3	4	y	4.5	6.5	8.5	11.5
x	0	1	2	3																	
y	0	4.5	9	13.5																	
x	1	2	3	4																	
y	4.5	6.5	8.5	11.5																	

g)

x	9	36	63
y	7	28	49

h)

x	y
22	4
46	8
58	10

k)

$$c = 9.5n$$

l)

$$y = 3.75x + 2$$

m)

$$12x = 5y$$

n)

$$K = C + 273.15$$