**Chapter 6 TEST**

**CALCULATOR PART**

 1. Between January 2010 and August 2010, Shannon’s balance on her bank account increased by $75 each month. In May 2010, she had $534 on her bank account.

a) Determine the balance on her bank, *s*, as a function of the number of months, *n*, since December 2009.

 [2]

b) How much money did she have in August 2010? [1]

 2. Francine has a T-shirts company. When people order T-shirts, she charges $50 plus $8.95 per T-shirt ordered.

a) Write an equation of the total cost, *C,* in dollars, for an order of *n* T-shirts. [1]

b) Marnell ordered 62 T-shirts. What was the total cost? [1]

c) Jakub paid $971.85 for his order. How many T-shirts did he order? [2]

**Chapter 6 TEST**

**NON CALCULATOR PART**

**Multiple Choices**

\_\_\_\_ 3. Which one is the graph of **?

|  |  |  |  |
| --- | --- | --- | --- |
| A. |  | C. |  |
| B. |  | D. |  |

**Free Response Questions:**

 4. Determine the slope of the line that passes through G (3, –3) et H (–5, 9). [1]

1. Which of the following are linear functions? Explain why they are not, when relevant. [2]

 *a)* $y=2$

*b)* $f\left(x\right)=2x^{2}+3$
 *c)* $y=-5+2x$
 *d)* $x= –1$

1. I) Determine if the following functions are linear. Justify your answer. [5]
II) If it is linear, determine the rate of change.
2. {(0, 2), (2, 4), (4, 2), (6, 4), (8, 2), (10, 4)}

1. 

|  |  |
| --- | --- |
| ***x*** | ***y*** |
| 7 | –4 |
| 4 | –7 |
| 1 | –10 |
| –2 | –13 |
| -8 |  |

1. **(fill in the last box in the table)**

1. Determine the equation of the following linear function.. [2]


2. Determine the slope of the following line segment. [1]



1. Determine the slope of the following line segment. [1]



1. Determine the slope of a line that has a *y*-intercept of 6 and an *x*-intercept of 2. [1]
2. A line passes through J (–10, 10) and K (7, –9). Determine the coordinates of a point L such that line JL is perpendicular to line JK. [1]
3. Determine an equation of the following line. [2]

**

1. Determine an equation in general form of the following line. [2]

**

1. Determine the value of *y* when  for **. [1]
2. Write the following equation in slope-intercept form: ** [1]
3. If a line passes through A (–2, 4) and B(–9, 6), what is its *y*-intercept? [2]

1. Determine the *x*- and *y*- intercepts of ** [2]

1. Determine the slope of the following line:  [1]

1. Are these segments parallel? Justify your answer. [1]



1. Graph the following lines without changing the form of their equation. [6]
 a) $y=\frac{2}{3}x-5$

 
 b) $y-3=-2(x+4)$

 

 c) $2x-3y+6=0$

 