## STUDY GUIDE Unit 2

CL 2-101. For the line graphed at right:
a. Find the slope.
b. Find the $y$-intercept.
c. Write the equation.


CL 2-102. Find $m$ and $b$ in the following equations. What do $m$ and $b$ represent?
a. $y=1+2 x$
b. $y=\frac{2}{5} x-4$

CL 2-104. Frosty starts with $\$ 85$ in the bank and saves $\$ 15$ every 2 months. Write an equation for the balance of Frosty's bank account.

CL 2-105. Find the slope for each linear relation described in the tables below.

| $x$ | -2 | -1 | 0 | 1 | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ | 19 | 14 | 9 | 4 | -1 |


| $x$ | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ | 22 | 31 | 40 | 49 | 58 |

CL 2-106. Write a rule for the given tile pattern. Hint: Make a table first.

How many tiles will be in figure 58 ?


Figure 1


Figure 2


Figure 3

CL 2-107. Solve for $w: 6 w-5+8 w-2 w-3=9 w-24$

CL2-108. Complete the table below for the rule $\mathrm{y}=x^{2}-6 \mathrm{x}+5$. Then graph the rule.

| $x$ | -1 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $y$ |  | 5 |  |  |  | -3 |  |  |  |

a. Is the relation a function?
b. State the domain and range.


CL 2-109. Find the slope of the line that passes through the points $(-5,7)$ and $(10,1)$.

