## MAKING CONNECTIONS: FINDING X AND Y INTERCEPTS

1. Graph the line $y=2 x-8$.

Slope: $\qquad$

2. Using your calculator, graph the line $x+3 y=9$. Then look at the table ( $2^{\text {nd }} \quad$ GRAPH. $)$ to
determine the following:
$y$-intercept: $\qquad$
x-intercept: $\qquad$
2 other points on the line: $\qquad$
3. Find the $x$ and $y$ intercepts of the line $x+3 y=9$ without using the calculator.

DUCK and COVER!
$y$-intercept: $\qquad$
x-intercept: $\qquad$

There are three ways to determine the $x$ and $y$ intercepts given the equation of a line:

1) Graph by hand, and find where the line $\qquad$ the $x$ and $y$ axis.
2) Put the equation in $Y=$ and then look at the $\qquad$ .
3) DUCK and COVER if the equation is in $\qquad$ form.
4. The ordered pairs in the table are contained in the graph of a linear function. What are the $x$ - and $y$-intercepts?

| $x$ | $y$ |
| :---: | :---: |
| -8 | -8 |
| -4 | -6 |
| 2 | -3 |
| 10 | 1 |

Equation: $\qquad$
x-intercept: $\qquad$
y-intercept: $\qquad$
5. What are the $x$ - and $y$-intercepts of the line $4 x+y=-12$ ?
$y$-intercept: $\qquad$
x-intercept: $\qquad$
6. What are the $x$ and $y$ intercepts of the function graphed below?
y-intercept: $\qquad$
x-intercept: $\qquad$
Equation: $\qquad$

7. The ordered pairs in the table are contained in the graph of a linear function. What are the $x$ - and $y$-intercepts?

| $x$ | $y$ |
| :---: | :---: |
| -12 | 0 |
| -6 | -3 |
| 0 | -6 |
| 4 | -8 |

x-intercept: $\qquad$
y-intercept: $\qquad$

