

Sketching Linear Equations

1. Consider the equation $y = 3x + 2$
 - a. What is the value of y when $x = 0$?
 - b. What is the value of x when $y = 0$?
 - c. Use the results of parts a. and b. to sketch the graph of $y = 3x + 2$.
2. Consider the equation $2x + y = 10$
 - a. What is the value of y when $x = 0$?
 - b. What is the value of x when $y = 0$?
 - c. Use the results of parts a. and b. to sketch the graph of $2x + y = 10$.
 - d. Why does this graph give a line sloping downwards from left to right?
(Hint: rearrange the equation into the form $y = mx + c$.)
3. What is the equation of the following sketched graph?

