

• **2-23. See below:**

a. B is the steepest; C is the least steep.

b. Downward; Δy is -2

c. A: $\frac{\Delta y}{\Delta x} = 1$, B: $\frac{\Delta y}{\Delta x} = 3$, C: $\frac{\Delta y}{\Delta x} = \frac{1}{2}$, D: $\frac{\Delta y}{\Delta x} = -2/5$

d. Possible responses: The value of slope indicates how steep the graph is. The greater the slope, the steeper the line. If the slope is positive, the line slants upward from left to right, while a negative slope indicates that the line slants downward from left to right.

e. In this case, she is correct. The steepest line (B) has the largest value for slope (3). Note that for negative slope, the steeper the line, the greater the absolute value of the slope.

• **2-24. See below:**

a. A is the steepest; B is steeper than C.

b. A: $\Delta x = 1, \Delta y = 2$;

B: $\Delta x = 2, \Delta y = 3$;

C: $\Delta x = 3, \Delta y = 2$;

D: $\Delta x = 5, \Delta y = -1$;

E: $\Delta y = 0$

c. A: $\frac{\Delta y}{\Delta x} = 2$,

B: $\frac{\Delta y}{\Delta x} = \frac{3}{2}$,

C: $\frac{\Delta y}{\Delta x} = \frac{2}{3}$,

D: $\frac{\Delta y}{\Delta x} = -1/5$, E: $\frac{\Delta y}{\Delta x} = 0$

2.24 d. It would slant downward from left to right because its slope is negative.

e. It would slant downward from left to right because its slope is negative. It would be steeper.

• **2-25.** A: $\frac{\Delta y}{\Delta x} = -1/2$, B: $\frac{\Delta y}{\Delta x} = -2$, C: $\frac{\Delta y}{\Delta x} = \frac{2}{3}$, D: $\frac{\Delta y}{\Delta x} = 0$