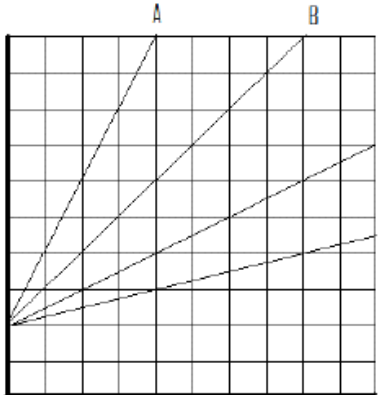


Matching Graphs and Equations

Part I:

- From various graph you have probably noticed that steepness of a line can be a graphical representation of a real-world rate of change (car's speed, walking a line).
- Study the graphs below.
- Study the equations at the side of each graph.
- Match each line with one of the equations. Be ready to share how you matched each line with its equation.

Match the Graph with the Equation

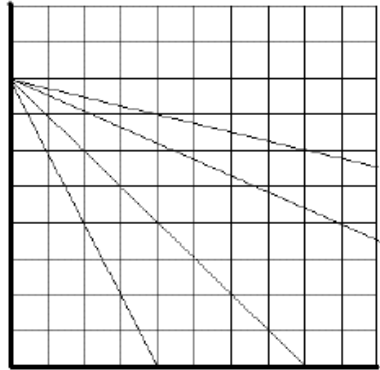


A B

C

D

1. $y = 2 + 1x$
2. $y = 2 + \frac{1}{2}x$
3. $y = 2 + 2x$
4. $y = 2 + \frac{1}{4}x$



A

B

D C

1. $y = 8 - 1x$
2. $y = 8 - \frac{1}{2}x$
3. $y = 8 - \frac{1}{4}x$
4. $y = 8 - 2x$

Part II:

- On the first picture draw a slope triangle on line A that illustrates its slope.
- Add a second slope triangle to line A that illustrates the same slope.
- Add a third slope triangle to line A that illustrates the same slope.

- On the first picture draw a slope triangle on line D that illustrates its slope.
- Add a second slope triangle to line D that illustrates the same slope.
- Add a third slope triangle to line D that illustrates the same slope.

- Ask students to add slopes triangles to the second picture to illustrate the slope.
- Ask students to add additional slope triangles to the same line to illustrate that the slope can be determined in more than one way.