

Notes: Day 5, Equation Intervals

Formulas: $m = \frac{\text{rise}}{\text{run}} = \frac{y - y_1}{x - x_1}$

$y = mx + b$

$y - y_1 = m(x - x_1)$

<u>Table</u>	<u>Equation</u>																
<table border="1" style="margin: auto; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Driveways Shoveled</th> <th style="padding: 5px;">Profit (dollars)</th> </tr> </thead> <tbody> <tr><td style="height: 20px;"> </td><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td><td style="height: 20px;"> </td></tr> <tr><td style="text-align: center; padding: 5px;">2</td><td style="text-align: center; padding: 5px;">-4</td></tr> <tr><td style="height: 20px;"> </td><td style="height: 20px;"> </td></tr> <tr><td style="height: 20px;"> </td><td style="height: 20px;"> </td></tr> <tr><td style="text-align: center; padding: 5px;">5</td><td style="text-align: center; padding: 5px;">20</td></tr> <tr><td style="height: 20px;"> </td><td style="height: 20px;"> </td></tr> </tbody> </table>	Driveways Shoveled	Profit (dollars)					2	-4					5	20			<p style="text-align: center;">Write the equation of the line using the given points.</p> <p style="text-align: center;">What is the slope and what does it mean?</p> <p style="text-align: center;">What is the y-intercept and what does it mean?</p>
Driveways Shoveled	Profit (dollars)																
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<u>Context</u>	<u>Graph</u>
<p style="text-align: center;">Discrete or Continuous</p> <p>Domain:</p> <p>Range:</p>	

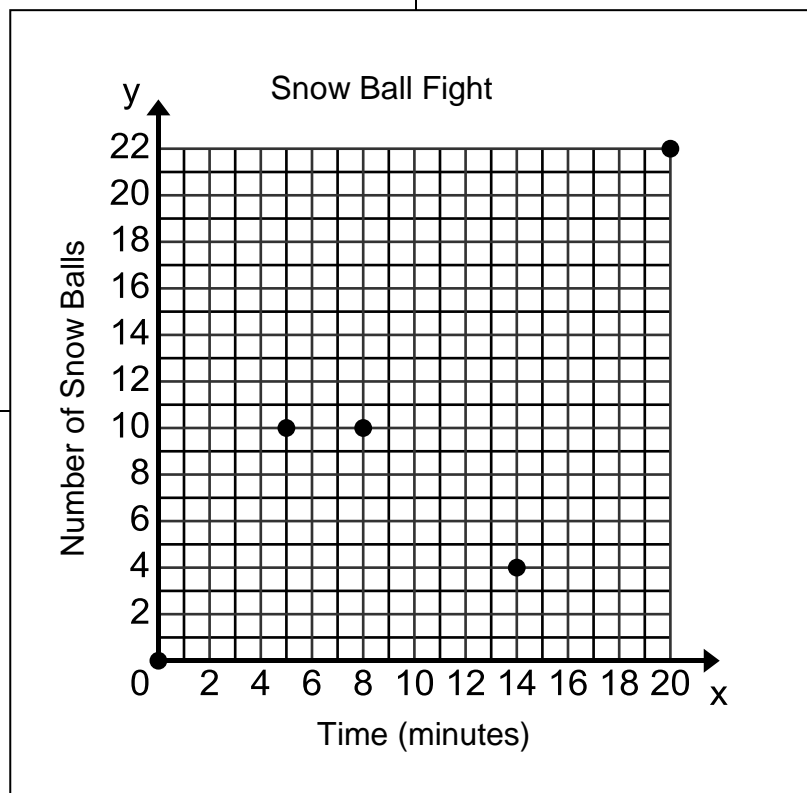
Function Notation

<p>What is the value of $f(12)$ and what does it mean?</p>	<p>What is the value of $f(20)$ and what does it mean?</p>	<p>What x-value makes $f(x) = 100$ true?</p>
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- a) Find the slope at each domain interval
- b) Explain what it means for the situation.
- c) Write the equation of the line at the given domain interval.

D: [0, 5]

D: [5, 8]



D: [8, 14]

D: [14, 20]

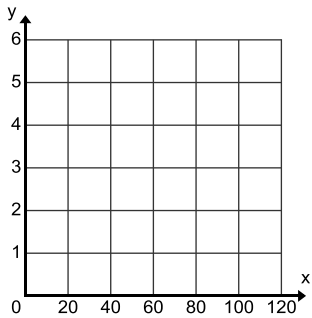
Assignment: Day 5, Equation Intervals

Formulas: $m = \frac{\text{rise}}{\text{run}} = \frac{y - y_1}{x - x_1}$

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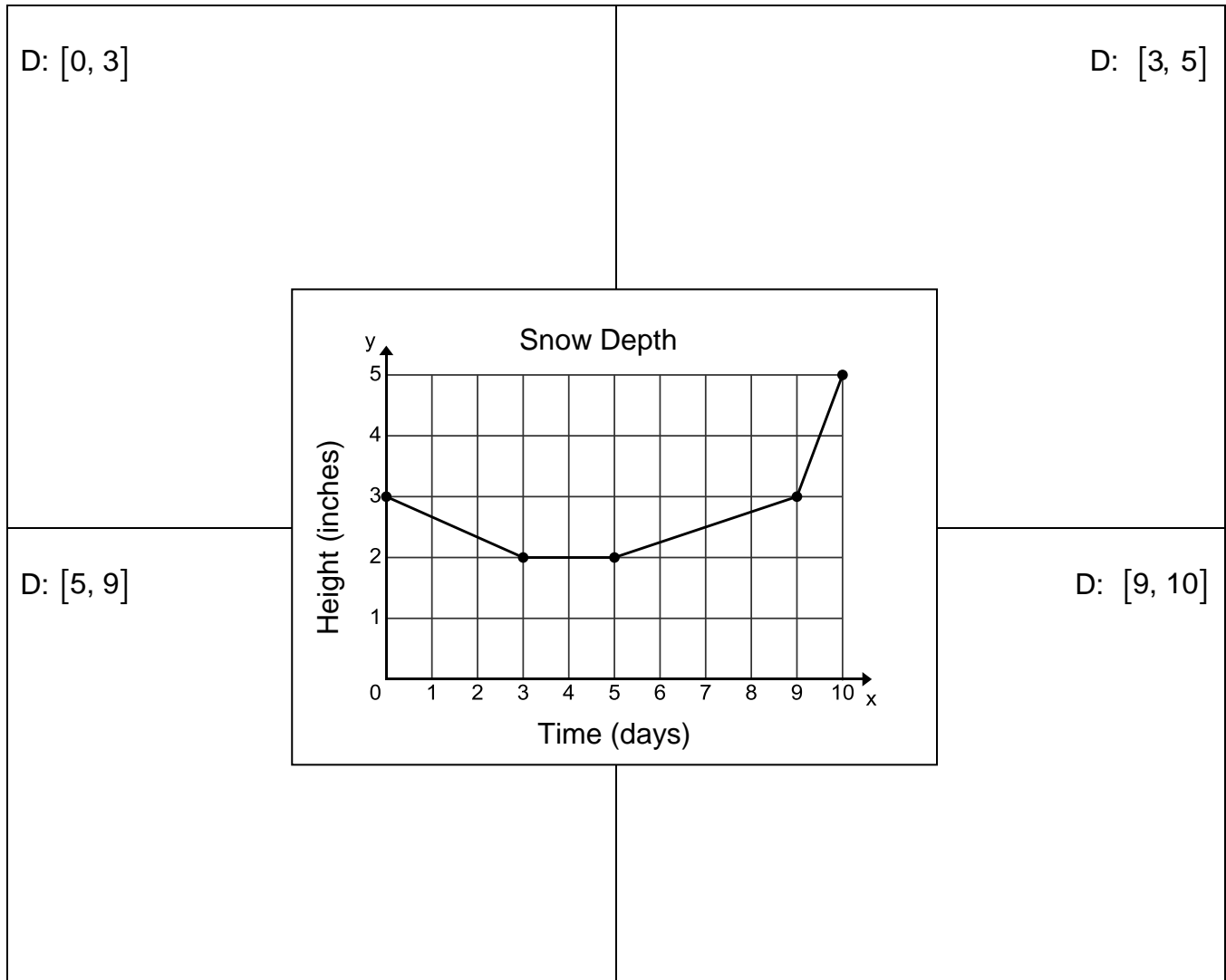
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<u>Context</u>	<u>Graph</u>
<p style="text-align: center;">Discrete or Continuous</p> <p>Domain:</p> <p>Range:</p>	

Function Notation

What is the value of $f(30)$ and what does it mean? What is the value of $f(160)$ and what does it mean? What x-value makes $f(x) = 10$ true?

- Find the slope at each domain interval
- Explain what it means for the situation.
- Write the equation of the line at the given domain interval.



Use the map of Washington D.C. to answer the questions below. Research the underlined words to answer the questions.

- Which building is a corresponding angle with the National Zoo?
- Which building is an alternate exterior angle with the Supreme Court?
- Which buildings form a linear pair with the US Treasury?
- Which building is a consecutive interior angle with Ford's Theater?

