

Worksheet 3-1 Rate of Change

1.

Number of Costumes	2	4	6	8
Fabric (yd)	7	14	21	28

Is this table linear? _____

If yes, what is the constant rate of change? _____

2.

Day	1	2	3	4
Distance(mi)	21.8	43.6	68.8	90.6

Is this table linear? _____

If yes, what is the constant rate of change? _____

3.

x	y
0	3
2	11
4	19
6	27
8	35

Is this table linear? _____

If yes, what is the constant rate of change? _____

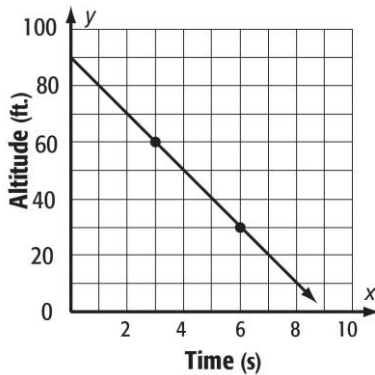
4.

Time (min)	Water left in pool (gal)
10	80
20	60
30	40
40	20

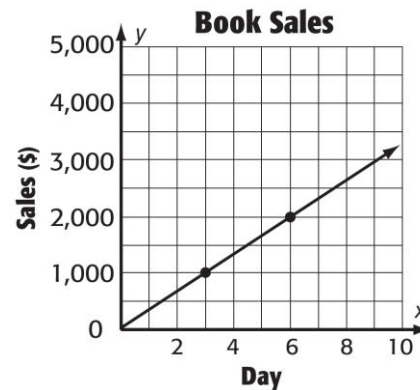
Is this table linear? _____

If yes, what is the constant rate of change? _____

Find the rate of change for each graph.

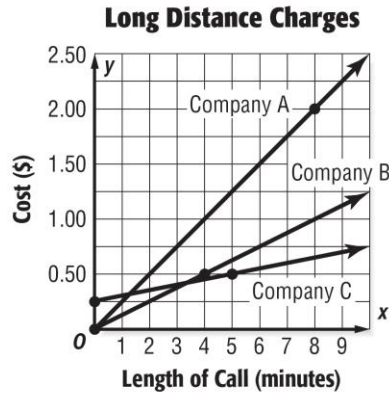
3. **Hawk Diving Toward Prey**

4.



Extension

LONG DISTANCE For Exercises 3–6, use the graph that compares the costs of long distance phone calls with three different companies.



<p>1. Interpret the difference between the cost in dollars and the length in minutes for Company A as a rate of change.</p>	<p>2. Interpret the difference between the cost in dollars and the length in minutes for Company B as a rate of change.</p>
<p>3. Interpret the difference between the cost in dollars and the length in minutes for Company C as a rate of change.</p>	<p>4. Which company charges the least for each additional minute? Explain your reasoning.</p>