Choosing a Cell Phone Plan-Verizon
Investigating Linear Equations

" **When am I ever going to use this?** "
Using the concepts in this worksheet, you will be able to determine which cell phone plan is the best value.

In 2008, Verizon offered the following cell phone plans to consumers. (Source: www.verizon.com)

Verizon: Nationwide Basic		
Monthly Anytime Minutes	**Monthly Fee**	**Charge for Extra Minutes**
450 minutes	$39.99	$0.45 per minute
900 minutes	$59.99	$0.40 per minute
1350 minutes	$79.99	$0.30 per minute

1. If a customer expects to use 500 minutes per month, which plan is the best value?

2. A cell phone plan consists of a fixed cost (the monthly fee) and a variable cost (charge for extra minutes). Find a linear function that gives the total cost of each plan when x extra minutes are used.

3. Using the cost functions from (2) above, determine the cost of using 600 total minutes and 1000 total minutes with each plan. Then determine which plan is the best deal for each level.

4. The number of minutes a person uses each month often varies. Suppose that a Verizon customer uses the total number of minutes shown below.

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
423	441	404	387	417	628	448	402	356	402	436	639

Which plan would cost the consumer the least amount money over the year?

5. At what number of extra minutes does the annual cost of the 900 Plan become less expensive than the 450 Plan?

6. Which plan would you recommend to a consumer who expects to use between 400 and 600 minutes each month? Explain your reasoning.