

Kim McGough
Calapooia Middle School
kim.mcgough@albany.k12.or.us

Algebraic Relationships
Level: 8th grade
Solving Equations

“Choosing the Best Cell Phone Plan”

Katie is trying to decide on the cell phone plan that will both meet her needs and her parent’s budget. She has researched different options and has four different plans to choose from. All of the plans include 750 anytime minutes plus the listed text messaging package. Katie usually sends and receives a total of 20 text messages per day.

Plan A offers unlimited text messaging for \$45 per month.

Plan B costs \$35 per month plus one cent for each text message sent or received.

Plan C costs \$25 per month plus five cents for each text message sent or received.

Plan D costs \$20 per month plus 10 cents for each text message sent or received.

(for the following questions, assume a month is 30 days)

1. What differences do you see in each plan? How do these differences affect the total cost of the plan?
2. Which plan is the best choice for Katie and her family?
3. In case she starts using text messaging more often, Katie wants to know which plan would be best if she started sending and receiving a total of 40 text messages per day. Which plan would you tell her to choose? Why?
4. Is there a certain number of text messages that would make each plan the same cost? If so, what is it? If not, why not?

