## Front-End Estimating Products and Quotients Guided Lesson Explanation

1. Step 1) Round the cost of each item. French fries = \$2 (\$2.15 rounded) Hamburgers = \$4 (\$3.75 rounded) Onion rings = 3 (\$2.95 rounded) Step 2) Multiply the cost of the items by the multiples needed for each item. 4 hamburger total cost = \$4 x 4 = \$16 3 French fries total cost =  $2 \times 3 = 6$ 2 onion rings total cost =  $3 \times 2 = 6$ Step 3) Add all the values to find the total cost. \$16 + \$6 + \$6 = \$28 2. Step 1) Round the cost of each item. Cheeseburgers = \$4 (\$4.25 rounded) Hot Dogs= \$3 (\$2.85 rounded) Baked Beans = \$5 (\$4.75 rounded) Step 2) Multiply the cost of the items by the multiples needed for each item. 2 cheeseburger total cost = \$4 x 2 = \$8 3 Hot dogs total cost = \$3 x 2 = \$6 1 baked beans total cost =  $5 \times 1 = 5$ 

Step 3) Add all the values to find the total cost.

8 + 6 + 5 = 19

Step 4) Determine the total number of 5-dollar bills that will satisfy \$19.

You can skip count by 5s: \$5 (1-bill), \$10 (2-bills), \$15 (3-bills), \$20 (4-bills)

4(5-dollar bills) will do it.



3. Step 1) Round the cost of onion rings and hamburgers.

Onion rings = \$3 (\$2.95 rounded) Hamburgers = \$4 (\$3.75 rounded)

Step 2) Determine how many friends would like a hamburger.

Stacey has 16 friends x 1/2 = 8 friends that would like a hamburger.

Step 3) Multiply the cost of the items by the multiples needed for each item.

16 orders of onion rings =  $3 \times 16 = 48$ 

8 orders of hamburgers =  $4 \times 8 = 32$ 

Step 4) Find the total cost:
This can be rounded (approximated) or left as whole, based on the directions.
Left as whole: \$48 + \$32 = \$80
Approximated: \$50 (\$48 rounded) + \$30 (\$32 rounded) = \$80

