Practice – Rates, Unit Rates and Writing Equations

Stores, catalogs, and Web sites often use rates in their ads. The ads sometimes give the costs for several items. You might see an offer like the one shown to the right.

Calculators for School
Fraction: $120 for 20
Scientific: $240 for 15
Graphing: $800 for 10

Suppose you take orders over the phone for the calculator company. You should be quick with price quotes for orders of different sizes.

A. Complete the rate table below. Fill in prices for each type of calculator for orders of the sizes shown.

Price of Calculators for Schools

Number Purchased	1	2	3	4	5	10	15	20
Fraction								$120
Scientific							$240	
Graphing						$800		

B. How much does it cost to buy 53 fraction calculators?

How much does it cost to buy 27 scientific calculators?

How much does it cost to buy 9 graphing calculators?

C. How many fraction calculators can a school buy if it can spend $390?

How many fraction calculators can a school buy if it can spend $84?

D. How many graphing calculators can a school buy if it can spend $2,500?

How many graphing calculators can a school buy if it can spend $560?

E. What arithmetic operation (addition, subtraction, multiplication, or division) do you use to find the cost per calculator?

F. Write an equation for each kind of calculator to show how to find the price (p) for any number ordered (n).

    Fraction:

    Scientific:

    Graphing: