Name _____ Date _____

1. Fill in the chart.

solve

Words	Expression ≠	The Value of the Expression
a. 25 times the sum of 72 and 28	$25 \times (72+28)$ $(72+28) \times 25$	2,500
b. Divide the difference between 1,000 and 850 by 5	$(1{,}000-850) \div 5$	30
c. The sum of 4 twenty-fives and 11 twenty-fives	$(4 \times 25) + (11 \times 25)$	375
d. 12 times the sum of 23 and 17	$12 \times (23+17)$	480
e. 10 times the sum of 325 and 75	$10 \times (325+75)$	4,000
f. The sum of 493 and 207 times 14	$(493+207) \times 14$	9,800

2. Compare the two expressions using <, >, or =. For each, explain how you can determine the answer without calculating.

a. 100×12 > $50 \times (2 \times 8)$ (100)

b. 47×12 < 50 fifteens – 3 fifteens

47 fifteens is going to always be greater than 47x12s

c. 36×36 = 18 eighteens, doubled

$18 \times 2 = 36$ 36×36

When you double 18 eighteens you get 36×36

3. Solve. Use words, numbers, or pictures to explain how your answers to Parts (a) and (b) are related.

a. $33 \times 20 =$ 660

b. $3.3 \times 20 =$ 33 tenths $\times 20 =$ 660 tenths

66.0

PV chart

The digits are the same. But the units in (b) are smaller so the answer is smaller. Ones are 10 times as large as tenths so the answer to (a) is 10 times larger than (b).

4. Multiply using the standard algorithm. Show your work below each problem. Write the product in the blank.

a. $424 \times 63 =$ 26,712

424
× 63

b. $746 \times 408 =$ 304,368

746
×408

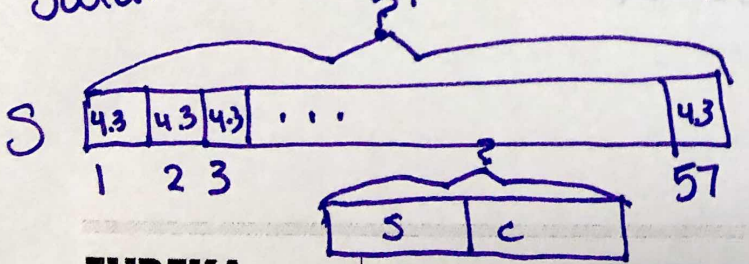
5. For a field trip, the school bought 57 sandwiches for $4.30 each and 29 bags of chips for $1.55 each. How much did the school spend in all?

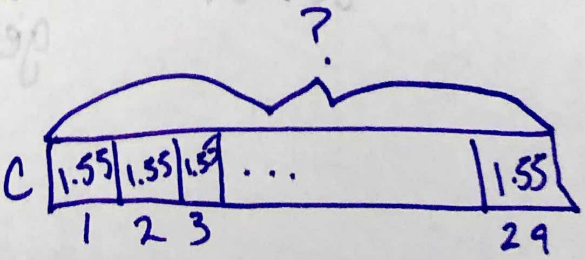
4.30
× 57
$245.10
sand.

$1.55
× 29
$44.95
chips

$ 1 1
$245.10
44.95
$290.05
in all

The school spent $290.05 in all.





1 unit = 7.5 ft

89 units = _____

6. Jeanne makes hair bows to sell at the craft fair. Each bow requires 2.5 yards of ribbon.

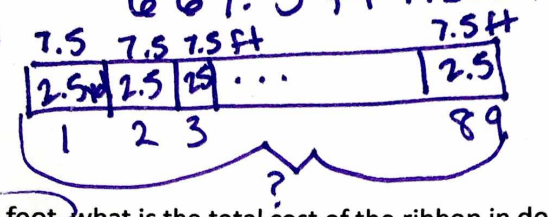
a. At the fabric store, ribbon is sold by the foot. If Jeanne wants to make 89 bows, how many feet of ribbon must she buy? Show all your work.

1 yd = 3 ft

2.5 yd = 2.5 × 1 yd
= 2.5 × 3 ft
= 7.5 ft

7.5 ft ribbon = 1 bow

89
× 7.5
667.5 ft ribbon



Jeanne must buy 668 ft of ribbon for 89 bows.

b. If the ribbon costs 20¢ per foot, what is the total cost of the ribbon in dollars? Explain your reasoning, including how you decided where to place the decimal.

668
× .20 ×100
$133.60 ÷100

668
×20
13360. ÷100
$133.60

To find dollars, I divided by 100 which moved my digits back 2 places to the right, so my decimal point went between the 3 and 6.

c. A manufacturer is making 10,000 times as many bows as Jeanne to sell in stores nationwide. Write an expression using exponents to show how many yards of ribbon the manufacturer will need. Do not calculate the total.

$89 \times 10^4 \times 2.5$