Name $\qquad$ Date $\qquad$

1. Fill in the chart.

| Words | Expression | The Value of the Expression |
| :--- | :--- | :--- |
| a. 40 times the sum of 42 and 24 |  |  |
| b. Divide the difference between <br> 1,300 and 600 by 5 |  |  |
| c.The sum of 2 fifteens and 12 <br> fifteens <br> d. | $10 \times(230+15)$ |  |
| e. 35 times the sum of 24 and 4 | $(350+740) \times 13$ |  |
| f. |  |  |

2. Compare the two expressions using < , > , or = . For each, explain how you can determine the answer without calculating.
a. $100 \times 4$
 $22 \times(6 \times 8)$
b. $36 \times 24$
 52 twelves - 3 twelves
c. $12 \times 48$ 14 twenty-fours, doubled
3. Solve. Use words, numbers, or pictures to explain how your answers to Parts (a) and (b) are related.
a. $15 \times 40=$ $\qquad$ b. $1.5 \times 40=$ $\qquad$ tenths $\times 40=$ $\qquad$
4. Multiply using the standard algorithm. Show your work below each problem. Write the product in the blank.
a. $516 \times 32=$ $\qquad$ b. $456 \times 503=$
5. For a field trip, the school bought 56 sandwiches for $\$ 5.40$ each and 45 bags of chips for $\$ 2.15$ each. How much did the school spend in all?
6. Lucinda makes hair bows to sell at the craft fair. Each bow requires 1.5 yards of ribbon.
a. At the fabric store, ribbon is sold by the foot. If Lucinda wants to make 78 bows, how many feet of ribbon must she buy? Show all your work.
b. If the ribbon costs $15 \$$ per foot, what is the total cost of the ribbon in dollars? Explain your reasoning, including how you decided where to place the decimal.
c. A manufacturer is making 1,000 times as many bows as Lucinda 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.
