

Name: Key

Mid-Module 2 Study Guide

1. Fill in the chart.

Words	Expression	Value of Expression
50 times the sum of 64 and 36	$50 \times (64 + 36)$	5000
Divide the difference between 1200 and 700 by 5	$(1200 - 700) \div 5$	100
The sum of 3 fifteens and 17 fifteens	$(3 \times 15) + (17 \times 15)$	300
15 times the sum of 14 and 6	$15 \times (14 + 6)$	300
10 times the sum of 250 and 45	$(250 + 45) \times 10$	2950

2. Compare the two expressions. Explain how you know without calculating.

a) 100×9

$>$

$(25 \times 4) \times 6$
 100×6

b) 12×16

$=$

42 sixteens - 30 sixteens

$42 - 30$

12 sixteens

c) 75×15

$<$

15 seventy-fives, doubled

$\times 2$

(5x3)

3. Tricia works at the clothing store 5 hours each day for 3 days. On the fourth day, she works 8 hours. Which expression represents how many hours Tricia works altogether? +8

a) $5 + 3 + 8$

b) $5 \times 3 \times 8$

c) $5 \times (3 + 8)$

d) $(5 \times 3) + 8$

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

a) $514 \times 33 =$ 16,962

$$\begin{array}{r} 514 \\ \times 33 \\ \hline 1542 \\ + 15420 \\ \hline 16962 \end{array}$$

b) $546 \times 405 =$ 221,130

$$\begin{array}{r} 546 \\ \times 405 \\ \hline 2730 \\ 218400 \\ \hline 221130 \end{array}$$

5. For the field trip, the school bought 47 sandwiches for \$4.60 each and 39 bags of chips for \$1.25 each. How much did the school spend in all?

$$\begin{array}{r} 4.60 \\ \times 47 \\ \hline 3220 \\ + 18400 \\ \hline \$ 216.20 \end{array}$$

$$\begin{array}{r} 1.25 \\ \times 39 \\ \hline 1125 \\ + 3750 \\ \hline \$ 48.75 \end{array}$$

$$\begin{array}{r} 216.20 \\ + 48.75 \\ \hline \$ 264.95 \\ \text{total} \end{array}$$

6. Kathy 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 Kathy wants to make 84 hair bows, how many feet of ribbon should she buy?

$$1.5 \text{ yd} = \underline{\quad} \text{ feet}$$

$$1.5 \times (1 \text{ yd})$$

$$1.5 \times (3 \text{ ft})$$

$$4.5 \text{ ft}$$

$$\begin{array}{r} 84 \\ \times 4.5 \\ \hline 420 \\ 3360 \\ \hline 378.0 \end{array}$$

378 ft
of ribbon

b) If the ribbon costs 10 cents per foot, what is the total cost of the ribbon in dollars? Explain your reasoning, including how you decided where to place the decimal point. cents = hundredths

$$378 \times 10 = 3780$$

$$\$37.80$$

c) A local manufacturer is making 10^3 times as many as Kathy to sell in stores nationwide. Write an expression using an exponent to show how many yards of ribbon the manufacturer will need. Do not calculate the total. not feet

$$(10^3 \times 84) \times 1.5$$