

Mid-Module 2 Review

Name _____ #: _____

Words	Expression	Value of the Expression
the sum of 4 and 2 divided by 3		
15 minus the sum of 3 and 2		
20 times the difference of 50 and 40		
divide the difference between 37 and 33 by 2		
5 times the difference of 16 and 4		
the product of 6 and 2 added to the quotient of 9 and 3		
	$12 - (8 + 3)$	
	$24 \div (12 - 6)$	
	$(7 \times 3) - (5 + 6)$	

2. Compare WITHOUT doing the calculation. Explain how you got your answer.

200×7 $25 \times (8 \times 9)$

17×8 20 eights - 2 eights

18×40 20 eighteens, doubled

3. Convert from standard form to unit form

$2.5 =$ _____ tenths

$18.2 =$ _____ tenths

$1.45 =$ _____ hundredths

$22.31 =$ _____ hundredths

4. Rewrite in expanded form, using exponents.

$$241 =$$

$$3271 =$$

$$540 =$$

5. Tate wants to buy 5 racing bicycles for his triathlon team. Each bicycle cost \$510.75. How much must Tate pay to buy 5 bicycles?

6. Hayden is very hungry for junk food. Each Junkie Bar costs 15 cents. How much will Hayden spend if he buys 27 Junkie Bars?

7. Sophia is making bows for Thanksgiving baskets. Each bow requires 2.4 yards of ribbon. Sophia wants to make 45 bows. How many FEET of ribbon must she buy?

8. Mrs. Felix's class plans to make 100 times as many bows as Sophia makes. Write an expression using an exponent to show how many YARDS of ribbon Mrs. Felix will have to buy for her class!

Words	Expression	Value of the Expression
the sum of 4 and 2 divided by 3	$(4+2) \div 3$	2
15 minus the sum of 3 and 2	$15 - (3+2)$	10
20 times the difference of 50 and 40	$20 \times (50-40)$	200
divide the difference between 37 and 33 by 2	$(37-33) \div 2$	2
5 times the difference of 16 and 4	$5 \times (16-4)$	60
the product of 6 and 2 added to the quotient of 9 and 3	$(6 \times 2) + (9 \div 3)$	15
12 minus the sum of 8 and 3	$12 - (8 + 3)$	1
24 divided by the difference between 12 and 6	$24 \div (12 - 6)$	4
the product of 7 and 3 minus the sum of 5 and 6	$(7 \times 3) - (5 + 6)$	10

2. Compare WITHOUT doing the calculation. Explain how you got your answer.

200×7 $\left(< \right)$ $\frac{25 \times (8 \times 9)}{200 \times 9}$

The product of 25 and 8 is 200, so 200 nines is greater than 200 sevens.

$\frac{17 \times 8}{17 \text{ eights}}$ $\left(< \right)$ $\frac{20 \text{ eights} - 2 \text{ eights}}{18 \text{ eights}}$

20 eights minus 2 eights is 18 eights. 18 eights is greater than 17 eights.

18×40 $\left(= \right)$ $\frac{20 \text{ eighteens, doubled}}{40 \text{ eighteens}}$

20 doubled is 40. 40 eighteens is equal to 18 forties (commutative property).

3. Convert from standard form to unit form

$2.5 = \underline{25}$ tenths

$18.2 = \underline{182}$ tenths

$1.45 = \underline{145}$ hundredths

$22.31 = \underline{2,231}$ hundredths

4. Rewrite in expanded form, using exponents.

$$241 = (2 \times 10^2) + (4 \times 10) + (1 \times 1)$$

$$3271 = (3 \times 10^3) + (2 \times 10^2) + (7 \times 10) + (1 \times 1)$$

$$540 = (5 \times 10^2) + (4 \times 10)$$

5. Tate wants to buy 5 racing bicycles for his triathlon team. Each bicycle cost \$510.75. How much must Tate pay to buy 5 bicycles?

$$\begin{array}{r} \$510.75 \\ \times \quad 5 \\ \hline \end{array} \rightarrow \begin{array}{r} 51075 \text{ hundredths} \\ \times \quad 5 \\ \hline 255375 \text{ hundredths} = 2553.75 \end{array}$$

Tate must pay \$2,553.75 for 5 bikes.

6. Hayden is very hungry for junk food. Each Junkie Bar costs 15 cents. How much will Hayden spend if he buys 27 Junkie Bars?

$$\begin{array}{r} \$0.15 \\ \times \quad 27 \\ \hline \end{array} \quad \begin{array}{r} 10 + 5 \text{ hundredths} \\ 7 \quad \begin{array}{|c|c|} \hline 70 & 35 \\ \hline \end{array} = 105 \\ + \\ 20 \quad \begin{array}{|c|c|} \hline 200 & 100 \\ \hline \end{array} = 300 \\ \hline 405 \text{ hundredths} = \$4.05 \end{array}$$

Hayden will spend \$4.05 on 27 Junkie Bars.

7. Sophia is making bows for Thanksgiving baskets. Each bow requires 2.4 yards of ribbon. Sophia wants to make 45 bows. How many FEET of ribbon must she buy?

$$\begin{array}{r} 2.4 \\ \times 45 \\ \hline \end{array} \quad \begin{array}{r} 20 + 4 \text{ tenths} \\ 5 \quad \begin{array}{|c|c|} \hline 100 & 20 \\ \hline \end{array} = 120 \\ + \\ 40 \quad \begin{array}{|c|c|} \hline 800 & 160 \\ \hline \end{array} = 960 \\ \hline 1080 \text{ tenths} = 108.0 = 108 \text{ yards} \end{array}$$

$108 \times (1 \text{ yard})$
 $108 \times (3 \text{ feet})$
 $= 324 \text{ feet}$

$$\begin{array}{r} 108 \\ \times 3 \\ \hline 324 \end{array}$$

8. Mrs. Felix's class plans to make 100 times as many bows as Sophia makes. Write an expression using an exponent to show how many YARDS of ribbon Mrs. Felix will have to buy for her class!

$$108 \text{ yds} \times 10^2$$