

Mrs. LL Taylor Name: Key # _____ Date: _____ Block: _____

Math PRACTICE Test

Decimals & Divisibility Rules

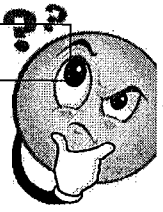
(Ch 1.1-1.2 & 3.3-3.6)

Reminder! Test is on
TUESDAY, Nov.8/16

"I Can" Learning Targets

- I **can** determine if a number is divisible by the factors of 2, 3, 4, 5, 6, 8, 9 and 10 and explain why or why not.
- I **can** determine why a number cannot be divided by 0.
- I **can** add, subtract, multiply, and divide decimals.
- I **can** use the Order of Operations to simplify expressions.

SELF ASSESSMENT



1st Part: Work Ethic is made up of 3 parts: Assignment Completion + Focus during Lessons + Asking for Help when unsure.

Underline the words that best describe your work ethic in this unit.

	Practice (Assignments)	Working in class (Focus)	Asking for Help
G	I always completed enough practice to make sure I understood the concept	I always work hard in class, both participating in the lesson and doing my practice.	I always ask questions during the lesson, or ask for extra help (in or outside of class) when I need it.
S	I sometimes did enough practice to make sure I understood the concept	I sometimes participate in the lessons and work on my practice in class.	I sometimes ask questions or ask for extra help when I need it.
N	I usually did not do enough practice to make sure I understood the concept.	I usually don't participate in the lessons, and don't work very hard in class at my practice.	I usually don't ask questions in class or ask for extra help.

My goal for next time is _____
I will accomplish this by _____

2nd Part: Achievement: Predict what grade (letter or number) you will earn on the actual test. Explain why.

- 4+ = A+
- 4 = A
- 3 = B
- 2 ½ = C+
- 2 = C
- 1 = C-

I predict that I will earn a _____ because:

NO Calculators on this page

1. Use the divisibility rules to determine which of these numbers is divisible by **14,115**. State clearly whether this number is divisible and explain how you know for this number. Do NOT just state the general rule.

Number	YES or NO	Explain how you know using the divisibility rules
2	No	• Not an even number since it ends in 5
3	Yes	$1+4+1+1+5 = 12$ $1+2 = 3$ when I sum the digits and reduce to 1 digit I get 3. (3, 6, 9 means # is divb by 3)
4	No	• Last 2 digits form the number 15, not divb 4 • I cannot divide in half twice
5	Yes	• ends in 5
6	No	• because it is not divb by 2 and a # is divb by 6 if divb by 2 and 3.
8	No	• Last 3 digits form the number 115, which is not divb 8. • I cannot divide in half three times.
9	No	$1+4+1+1+5 = 12$ $1+2 = 3$ when I sum the digits and reduce, I don't get exactly 9.
10	No	• It does NOT end in a 0

Is 0 a factor for 14,115? Explain why or why not. HINT: Explain what a factor is

No because you cannot divide 14 115 into nothing or 0 groups.

NO Calculators on this page

2. Find all the factors of 160. Show your work! Ex: 1×160

160

1×160	5×32	9
2×80	6 3 is not a factor	10×16
3	7	
4×40	8×20	

$1+6+0=7$

The factors of 160 are: 1, 2, 4, 5, 8, 10, 16, 20, 40, 80, 160

3. Estimate, then find the **sum**. SHOW WORK!

a) $1.71 + 2.9 =$ 4.61

Estimate Calculate

$\frac{2}{+3} = \frac{5}{5}$ etc.

$$\begin{array}{r} 1.71 \\ + 2.90 \\ \hline 4.61 \end{array}$$

b) $64.3 + 0.997 =$ 65.297

Estimate Calculate

$\frac{60}{+1} = \frac{61}{61}$ etc.

$$\begin{array}{r} 64.3 \\ + 0.997 \\ \hline 65.297 \end{array}$$

4. Estimate, then find the **difference**. SHOW WORK!

a) $19.8 - 8.43 =$ 11.37

Estimate Calculate Check

$\frac{20}{-8} = \frac{12}{12}$ etc.

$$\begin{array}{r} 19.80 \\ - 8.43 \\ \hline 11.37 \end{array}$$

← add 0

$$\begin{array}{r} 11.37 \\ + 8.43 \\ \hline 19.80 \end{array}$$

b) $657.2 - 78.23 =$ 578.97

Estimate Calculate Check

$\frac{650}{-80} = \frac{570}{570}$ etc.

$$\begin{array}{r} 657.20 \\ - 78.23 \\ \hline 578.97 \end{array}$$

$$\begin{array}{r} 578.97 \\ + 78.23 \\ \hline 657.20 \end{array}$$

5. Estimate, then find the **product**. SHOW WORK!

a) $2.8 \times 0.7 =$ 1.96

Estimate Calculate

$\frac{3}{\times 1} = \frac{3}{3}$

$$\begin{array}{r} 2.8 \\ \times 0.7 \\ \hline 1.96 \end{array}$$

almost 2
close to 3

b) $6.1 \times 3.79 =$ 23.119

Estimate Calculate

$\frac{6}{\times 4} = \frac{24}{24}$

$$\begin{array}{r} 3.79 \\ \times 6.1 \\ \hline 23.119 \end{array}$$

6. Estimate, then find the quotient. SHOW WORK!

a) $5.7 \div 0.4 =$ 14.25
 Calculate Check

$$0.4 \overline{) 5.7}$$

$$4 \overline{) 14.25}$$

$$\begin{array}{r} 14.25 \\ -4 \\ \hline 10 \\ -8 \\ \hline 20 \\ -20 \\ \hline 0 \end{array}$$

b) $145.8 \div 1.6 =$ 91.125
 Calculate Multiples Chart

$$1.6 \overline{) 145.8}$$

$$16 \overline{) 1458.000}$$

$$\begin{array}{r} 91.125 \\ -144 \\ \hline 18 \\ -16 \\ \hline 20 \\ -16 \\ \hline 40 \\ -32 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 91.125 \\ \times 16 \\ \hline 56750 \\ 911250 \\ \hline 1458000 \end{array}$$

Check 1458.000 ✓

$16 \times 1 = 16$
 $2 = 32$
 $3 = 48$
 $4 = 64$
 $5 = 80$
 $6 = 96$
 $7 = 112$
 $8 = 128$
 $9 = 144$

7. A mega case of Gatorade is on sale for \$39.54. There are 24 bottles in ~~80~~ case. What is the cost of each ~~case of soup?~~ bottle? Show your work! Calculate to 3 decimal places. Your answer will have 2 decimal places (why?)

OK no decimal in divisor

$$24 \overline{) 39.540}$$

$$\begin{array}{r} 1.647 \\ -24 \\ \hline 155 \\ -144 \\ \hline 114 \\ 96 \\ \hline 180 \\ -168 \\ \hline 12 \end{array}$$

can stop once you have 3 digits after decimal

Round to 2 dec places because money is expressed to hundredths place

$$1.647 \rightarrow \$1.65$$

The cost will be \$1.65 for each bottle.

- $24 \times 1 = 24$
- $\times 2 = 48$
- $\times 3 = 72$
- $\times 4 = 96$
- $\times 5 = 120$
- $\times 6 = 144$
- $\times 7 = 168$
- $\times 8 = 192$
- $\times 9 = 216$

8. Ava has a part-time job as a playground leader supervising children. Her hourly wage is \$9.25. She works 17.5 hours per week.

a. Find Ava's weekly wage:

a. Estimate: 180 Actual: \$161.88

b. How much money would Ava earn in 5 weeks?

\$809.40

$$\begin{array}{r} 20 \\ \times 9 \\ \hline 180 \end{array}$$

$$\begin{array}{r} 9.25 \\ \times 17.5 \\ \hline 4625 \\ 64750 \\ 92500 \\ \hline 161875 \end{array}$$

$$\begin{array}{r} 9.25 \\ \times 17.5 \\ \hline 161.875 \end{array}$$

Now add in decimal

$$\begin{array}{r} 161.88 \\ \times 5 \\ \hline 809.40 \end{array}$$

In 1 week, Ava earns \$161.88 and in 5 weeks, she earns \$809.40.

Practice Test - Part 2: Order of Operations with Decimals

NO Calculators on this page

Calculators are permitted, however, you must still SHOW HOW you got your answer.
 Directions: Underline each step. Copy the rest. Only do 1 step at a time.

9. Simplify your expression (solve)

a) $14.1 - 2.4 \times 5 = \underline{2.1}$

$$\underline{14.1 - 12}$$

$$\boxed{2.1}$$

b) $6.5 \div 0.5 \times 4 = \underline{52}$

$$\underline{13 \times 4}$$

$$\boxed{52}$$

B
E
D
A
S

c) $(74.1 - 57.2 + 3.8) \times 0.6 = \underline{12.42}$

$$\underline{(16.9 + 3.8) \times 0.6}$$

$$20.7 \times 0.6$$

$$\boxed{12.42}$$

d) $8.4 \times 2 \div (7.2 - 5.1) = \underline{8}$

$$\underline{8.4 \times 2} \div 2.1$$

$$16.8 \div 2.1$$

$$\boxed{8}$$

★ This is all you need to do for this page.
 1 step at a time, underline, solve, copy the rest.