

Unit 5 Packet

Name _____

S T A M P	Classwork Or Homework Title/Name of page All of the assignments in this section are required. Please check off as you complete
REQUIRED 65 points	<input type="checkbox"/> Converting notes page 1-2 <input type="checkbox"/> Percents notes page 3 <input type="checkbox"/> Convert decimal to percent page 4 <input type="checkbox"/> Practice converting decimal to percent page 5 <input type="checkbox"/> Fraction Decimal Percent Equivalency page 6 <input type="checkbox"/> Converting fractions, decimals, percents page 7 <input type="checkbox"/> Order from least to greatest page 8-9 <input type="checkbox"/> Different forms of a number review page 10 <input type="checkbox"/> Opposites and absolute value page 11-12 <input type="checkbox"/> Opposites and absolute value Sections 1-6 pages 12-14 <input type="checkbox"/> Comparing and ordering rational numbers page 15 <input type="checkbox"/> Comparing and ordering rational numbers practice page 16 <input type="checkbox"/> Unit study guide <input type="checkbox"/> Lesson Links Packet on integers-this should have been turned in and completed before track out You must submit these through google classroom in a google form <input type="checkbox"/> Integer Quick Check-this should have been completed and submitted before track out <input type="checkbox"/> Rational Numbers Quick check
	5 points
	REQUIRED 5 points each

	Layer C Choose 2 activities listed below Each activity is 5 points
Choose 2 5 points each	<input type="checkbox"/> Negative and Positive Fractions <input type="checkbox"/> Exploration Recording Sheet- Percents <input type="checkbox"/> Percentages, Fractions and decimals WS
	Layer B Choose 2 activities listed below. if you complete through Layer B, you can earn a 100.
Choose 2 5 points each	<input type="checkbox"/> Elevations of some of Earth's Geographic Features <input type="checkbox"/> Problem Solving Percents, decimals and fractions # 1-10 <input type="checkbox"/> Real Life Problems # 1-5
	Layer A Choose 1 activity listed below. This is a BONUS layer. You must complete Layer C and B in order to be eligible to complete one of the following activities.
Choose 1 10 points each	<input type="checkbox"/> Practice C- Percents, decimals, and fractions #1-2,3 <input type="checkbox"/> Comparing and ordering in a mixed set # 1-2 <input type="checkbox"/> Mathematical Message

Total Points _____

Converting

Decimal to Fraction

- 1) Say the "proper" name of the decimal
- 2) Write what you hear as a fraction
- 3) Simplify

Example: $0.24 =$ twenty four hundredths

Why does this method work?

Practice

1) 0.6	2) 10.9
3) 0.08	4) 6.25

Fraction to Decimal

- 1) Re-write the fraction as a decimal
- 2) Use long division to get the decimal equivalent

Example $\frac{4}{5}$

Why does this method work?

Practice

1) $\frac{5}{8}$	2) $\frac{3}{20}$
3) $9\frac{2}{5}$	4) $3\frac{11}{16}$

Can you think of other methods?

Practice

Convert to either a fraction or a decimal

- 1) 0.27
- 2) 1.6

- 3) $2\frac{3}{5}$
- 4) $\frac{7}{20}$

Percents

Give examples of the way you have seen percents used in everyday life.

What does the word ‘PERCENT’ mean?

Percents-another way to represent an amount of something in math

Any amount can be represented using a FRACTION, DECIMAL OR PERCENT.

For example: $0.5 = \text{_____} \% = \text{_____}$

All 3 ways are equivalent just in a different form of the number.

Use the definition of percents to convert

Percent	Fraction(simplify)	Decimal
90%		
44%		
120%		

Convert decimal to percent

Think ‘how many hundredths?’

Decimal	Fraction(simplify)	Percent
0.23		
0.60		
0.205		

Fraction	decimal	percent
$\frac{1}{5}$		
$\frac{3}{4}$		
$\frac{2}{9}$		

Practice

Highlight which number is greater

	0.9	95%
Fraction		
Decimal		
Percent		

	20%	0.02
Fraction		
Decimal		
Percent		

	$\frac{37}{50}$	37%
Fraction		
Decimal		
Percent		

	50%	$\frac{13}{25}$
Fraction		
Decimal		
Percent		

Fraction, Decimal, Percent Equivalency

Fill in the missing percent, decimal or fraction and/or dollar amount for each example in the table.

Number of squares out of 100	Fraction out of 100	Fraction in simplest form	Decimal	Percent	Equivalent Dollar Amount
75	$\frac{75}{100}$	$\frac{3}{4}$	0.75	75%	\$0.75
		$\frac{1}{5}$	0.2		
30			0.3		
		$\frac{12}{25}$		48%	
60					
				37%	
			0.56		
44		$\frac{23}{25}$			
		$\frac{7}{10}$			
				91%	

Benchmark Numbers

Decimal

Percent

Converting Fractions, Decimals and Percents

Fill in the missing in each row.

Fraction	Decimal	Percent
	0.73	
		15%
$\frac{4}{5}$		
		37.5%
$\frac{1}{3}$		
	0.125	
$\frac{1}{4}$		
		42%
	1.56	
		100%
$\frac{5}{9}$		

Order the numbers from least to greatest. Fill out the chart

	$\frac{3}{5}$	11%	0.14
Fraction			
Decimal			
Percent			

Least to greatest _____

	$\frac{1}{2}$	0.17	$\frac{1}{3}$
Fraction			
Decimal			
Percent			

Least to greatest _____

	$\frac{4}{5}$	0.92	$\frac{1}{4}$	28%
Fraction				
Decimal				
Percent				

Least to greatest _____

Different forms of a number review

Write each percent as a fraction in simplest form

- 1) 40% 2) 30% 3) 55%
 4) 75% 5) 140% 6) 175%

	38%	8/25	68%	13/20	0.41
Fraction					
Decimal					
Percent					

Least to greatest _____

Write each decimal as a percent

- 7) 0.3 8) 0.7 9) 0.19
 10) 0.74 11) 0.66 12) 0.52
 13) 0.21 14) 0.81 15) 1.37

	4/9	55%	3/8	0.08	0.29
Fraction					
Decimal					
Percent					

Least to greatest _____

Write each percent as a decimal

- 16) 5% 17) 8% 18) 37%
 19) 12% 20) 29% 21) 54%

Opposites and Absolute Value

Opposite

Definition:

Examples:

Additional facts:

Absolute Value

Definition:

Examples:

Additional facts:

Remember that distance is always a positive quantity (or zero). Show absolute value with vertical bars on each side of the number.

Use a number line to find the opposite of the number.

1. 4
2. -2
3. -5
4. 1



Practice:

Match the description with the number that represents it.

You may use some answer choices more than once or not at all.

Section 1

- | | |
|--------------------|--------|
| 1. Opposite of 19 | a. -19 |
| 2. $ 91 $ | b. 19 |
| 3. $ -19 $ | c. -91 |
| 4. Opposite of -91 | d. 91 |

Section 2

5. Opposite of -7
6. Opposite of 6
7. $|-7|$
8. Opposite of -2
9. $|1|$
10. Opposite of 28
11. $|-199|$
12. $|78|$
13. Opposite of -50
14. $|-302|$
15. $-|-688|$
16. Opposite of 76
17. $-|56|$
18. Opposite of 65
19. $|0|$
20. Opposite of -31

Section 3

1. What two numbers have an absolute value of 8?
2. What two numbers have an absolute value of 12?
3. What two numbers have an absolute value of 20?
4. What pattern do you see in the numbers that have the same absolute value?

Section 4

Write the next three integers in each pattern. Use absolute value notation

1. $|-8|$, $|10|$, $|-12|$, $|14|$ _____
2. $|-1|$, $|-3|$, $|-5|$, $|-7|$ _____
3. $|1|$, $|-2|$, $|3|$, $|-4|$ _____
4. $|-5|$, $|-10|$, $|-15|$, $|-20|$ _____

Section 5

Determine if the statement $<$, $>$, or $=$

1. $|-7.5|$ _____ $|7|$
2. $|-2|$ _____ $|2|$
3. $|-3/4|$ _____ $|1/2|$
4. $|4|$ _____ $|-6|$

Section 6

1. Which expression has the absolute value of -81?
a. $|-81|$ b. 81 c. $|81|$ d. $-|81|$
2. Which list show the values in order from least to greatest?
a. $|-5|$, 5, $|-3|$, 3 c. $|-5|$, $|-3|$, $|3|$, $|5|$
b. -5, $-|-3|$, 3, $|-5|$ d. -3, $-|-5|$, $-|3|$, 5
3. An integer is positive, negative or _____
4. All _____ integers are less than zero.
5. The opposite of a _____ number is negative
6. The absolute value of an integer is never _____

Comparing and Ordering Rational Numbers

Convert each decimal as a percent and as a fraction or mixed number.

1. 0.34 _____
2. 0.006 _____
3. 1.14 _____
4. 0.65 _____

Write each fraction as a percent and as a decimal.

5. $\frac{1}{5}$ _____
6. $\frac{7}{8}$ _____
7. $\frac{24}{25}$ _____
8. $\frac{14}{5}$ _____

Compare. Write $<$, $>$, or $=$.

9. 0.18 $\frac{14}{25}$
10. 0.4 4%
11. 18% $\frac{8}{10}$
12. 90% $\frac{8}{9}$
13. $|-3|$, 5% , $\frac{2}{5}$, -5
14. -0.32 , $\frac{3}{4}$, $-|1|$, 2.2%

Convert the following numbers to decimals and order them from least to greatest.

15. Your teacher has offered you a choice for your 50 homework problems. You can do 48% of the problems, all of the even-numbered problems, or $\frac{3}{5}$ of the problems. Which option will you choose? How many problems will you have to do for homework?

Name _____ Date _____

Comparing and Ordering Rational Numbers Practice

Compare and Order

Arrange the following in **DESCENDING ORDER**.

- 1.) -0.65 , 1.21 , $-1\frac{3}{4}$, $|-10.5|$ _____
- 2.) $|18|$, -0.82 , $12\frac{2}{3}$, -5.78 _____

Arrange the following in **ASCENDING ORDER**.

- 3.) 11.1 , -10 , $|-12|$, $5\frac{1}{4}$ _____
- 4.) -2.33 , 19.25 , -2.01 , $|19|$ _____

Use the symbols ($<$, $=$, $>$) to answer the following questions.

- 5.) -30.25 _____ $|-30.323|$
- 6.) -16 _____ -51
- 7.) 0.40 _____ $|-0.40|$

Word Problems-Show your work

- 8.) While exploring a cave, Ricky noticed that the temperature dropped 4°F for every 30 ft. he descended. What is Ricky's depth if the surface temperature is 12° lower than the temperature at the surface?

- 9.) Asheka's checking account had a balance of \$50. She then deposited \$65 into her account. That same day she wrote a check for \$18.00, bought lunch that cost \$7.50, and spent \$41.50 at the mall. What is Asheka's new checking account balance?

- 10.) Tom, Kim, and Jordan went on a family vacation to Hawaii. Tom climbed to the top of a mountain which measured 213.45 feet. Kim went scuba diving and dove 18.3 feet below sea level. Jordan went shopping at a local straw market that was 18.33 feet above sea level. Place their elevation in order from least to greatest.

Student Name: _____

Unit 4 Integers Study Guide
Calculator Inactive

Use $>$, $<$, $=$ to compare the numbers:

1. $| -11 |$ ○ $| -30 |$

- a. $<$
- b. $>$
- c. $=$

2.

$| -9 |$ ○ -9

- a. $<$
- b. $>$
- c. $=$

2. -2.65 ○ -2.6

- a. $<$
- b. $>$
- c. $=$

4.

$-|4^3|$ ○ 3^4

- a. $<$
- b. $>$
- c. $=$

5. Which number is farther away from zero? $-|-13.9|$ or 18

- a. $-|-13.9|$
- b. 18

6. Which number has the greatest absolute value?
 26 , -12 , -17 , 28

- a. 26
- b. -12
- c. -17
- d. 28

7. The balance in Jamie's checkbook is $-\$14.94$. The balance in Katie's checkbook is $-\$12.95$. Who owes more money?

- a. Jamie
- b. Katie

Given 172%

8. What is the equivalent fraction?

(Make sure your fraction is written in simplest form and as an improper fraction)

9. What is the equivalent decimal?

- a. 1
- b. |0|
- c. -1
- d. |-2|

15. Which expression has the greatest value?

- a. -3 is equal to the opposite of -3
- b. 3 is equal to |-3|
- c. The opposite of 0 is infinity
- d. The opposite of 0 is negative infinity

14.

Which statement is true?

13. Which fish swam the deepest below the surface? _____

12. Which fish swam the closest to the surface? _____

Type of Fish	Depth below the surface
Fried Shark	-7,000 ft
Atlantic Wolffish	-1,800 ft
Pacific Viperfish	-1,000 ft
Six Gill Shark	-5,200 ft
Fangtooth fish	-3,500 ft

An oceanographer took measurements of fish swimming at different depths in the ocean.

11. Which day was the warmest? _____

10. Which day was the coldest? _____

Monday	-5.2° F
Tuesday	-6° F
Wednesday	0.9° F
Thursday	0° F
Friday	-0.2° F
Saturday	-9° F
Sunday	-5.8° F

A meteorologist found the following temperatures in Grand Rapids, Michigan for one week.

Student Name: _____

Student Name: _____

16. Four values are given below:

-8 7 |-9| |-6|

Which value is the farthest left on the number line?

- a. -8 is the farthest left on the number line.
- b. 7 is the farthest left on the number line.
- c. |-9| is the farthest left on the number line.
- d. |-6| is the farthest left on the number line.

17. Which statement about opposite numbers is NOT true?

- a. Opposite numbers are the same distance from 0 on the number line.
- b. Opposite numbers are on different sides of 0 on the number line.
- c. The sum of opposite numbers is always 0.
- d. The difference of opposite numbers is always 0.

18. Put the following numbers in order from least to greatest:
 $-3\frac{1}{3}$, $-1\frac{1}{4}$, 2.8, |-1.2|, 125%

Least to Greatest: _____

19. Put the following numbers in order from least to greatest:

0.9, |-5|, -3.5, $-\frac{5}{2}$, 70%

Least to Greatest: _____

20. Julie took a vacation to the Appalachian in West Virginia. She did a lot of hiking and sometimes she was above sea level and sometimes she was below sea level. Put her stopping points in order from least (below sea level) to greatest (above sea level). She stopped at the following elevations:

-184.38 feet, 184.284 feet, $-184\frac{1}{2}$ feet, 188 $\frac{284}{1000}$ feet.

Below sea level to above sea level: _____