PRACTICE **Name:** Key

LESSON 1: COMPARING & ORDERING NUMBERS

Learning Goal 2: I can ***compare*** integers and decimals using the symbols < , > , and = .

- What is an ***integer***? Give **THREE** examples of ***integers***: An integer is a negative or positive whole number, like −10, 8, and −99.

- Explain how you would compare **0.25** and **0.125**. Which is ***greater***? I line up the decimal and fill empty spaces with zeros. Then I can see that 0.250 is greater than 0.125

0.250
0.125

- Explain how you would compare -0.25 and 0.125. Which is ***greater***? I know that 0.125 is greater than −0.25 because all positives are always greater than negatives! (Golden Rule #1)

- Explain how you would compare -0.25 and -0.125. Which is ***greater***? I know negatives are opposites. Since 0.25 > 0.125, the opposite is −0.25 < −0.125 (Golden Rule #3)

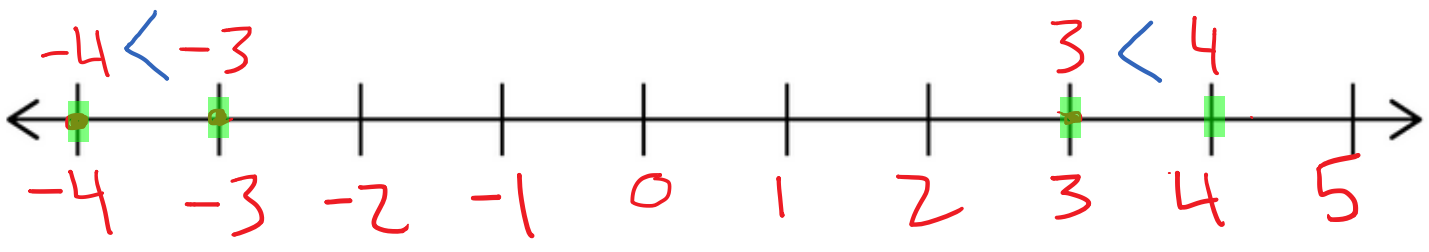
−0.250
−0.125

Inside the circle, write the symbol $<$, $>$, ***or*** $=$. Use the place value table to help. Then, put the values on the number line.

1. 3 < 4

2. −3 > −4

	Tens	Ones	.	Tenths	Hundredths	Thousandths
		3	.			
		4	.			
−		3	.			
−		4	.			



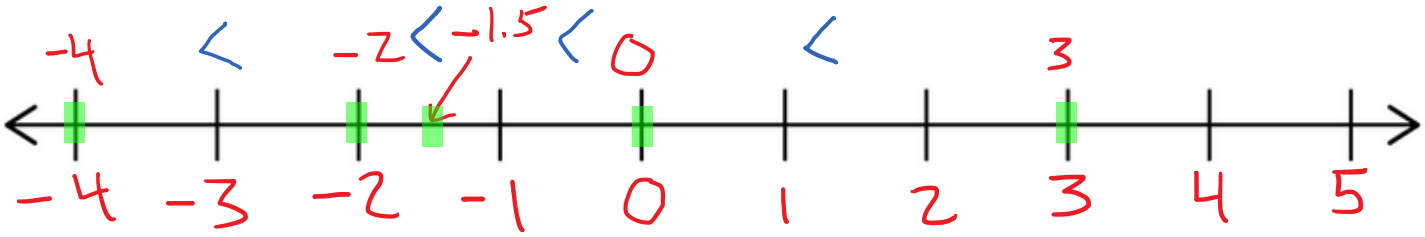
3. $3 \quad > \quad -4$

4. $0 \quad > \quad -2$

5. $-1.5 \quad > \quad -2$

Tens	Ones	.	Tenths	Hundredths	Thousandths
	3	.			
	4	.			
	0	.			
	2	.			
	1	.	5		
	2	.	0		

6. Place the numbers from ***questions 3 through 5*** on the number line:



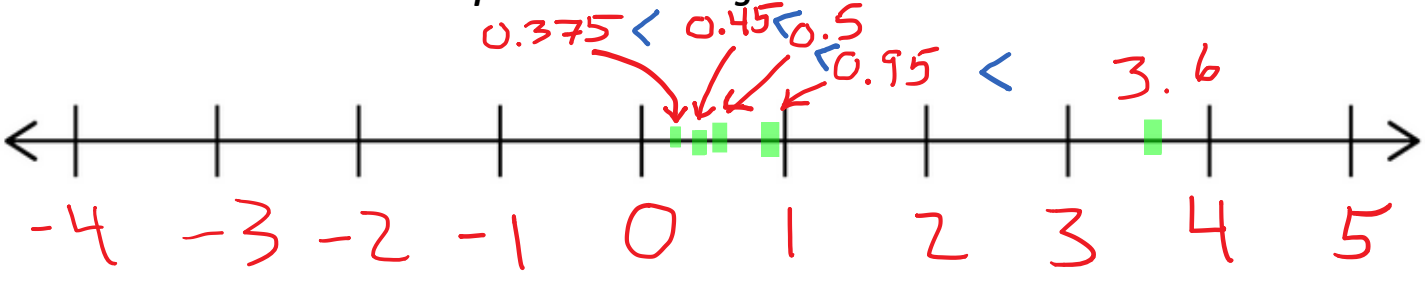
7. $3.6 \quad = \quad 3.60$

8. $0.45 \quad < \quad 0.5$

9. $0.375 \quad < \quad 0.95$

Tens	Ones	.	Tenths	Hundredths	Thousandths
	3	.	6	0	
	3	.	6	0	
	0	.	4	5	
	0	.	5	0	
	0	.	3	7	5
	0	.	9	5	0

10. Place the numbers from ***questions 7 through 9*** on the number line:



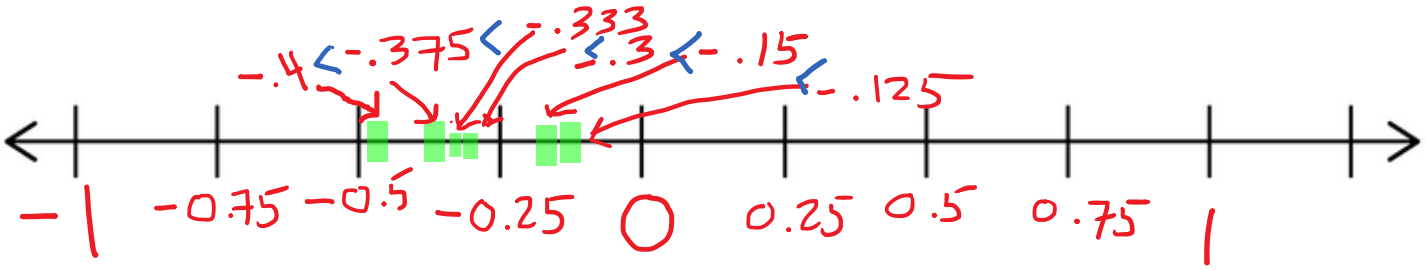
11. -0.375 (>) -0.4

12. -0.15 (<) -0.125

13. -0.333 (<) -0.3

	Tens	Ones	.	Tenths	Hundredths	Thousandths
−		0	.	3	7	5
−		0	.	4	0	0
−		0	.	1	5	0
−		0	.	1	2	5
−		0	.	3	3	3
−		0	.	3	0	0

14. Place the numbers from ***questions 11 through 13*** on the number line:



Fill the circles with the symbol $<$, $>$, ***or*** $=$.

1. -0.5 (<) 2

2. -75 (<) 0.75

3. 0.850 (>) 0.250

4. 0.380 (=) 0.380

5. -12 (<) -4

6. 0 (>) -10.5

Now try using your skills from ***Learning Goal 1*** to ***convert***, then ***compare*** these numbers!

1. 25% ÷100 0.25 (>) 0.20

2. -0.375 ( ) -38%

3. -0.1700 (<) $-\frac{1}{6}$ $-1 \div 6 = -.1666$

4. $-\frac{1}{8}$ (>) -0.150 $-1 \div 8 = -.125$

5. $-\frac{5}{7}$ (>) $-\frac{4}{5}$ $-5 \div 7 = -.71$ $-4 \div 5 = -.80$

6. $66\frac{2}{3}\%$ (<) 0.8000 $2 \div 3 = .66$ $66.66\% \div 100 = .6666$