EUREKA MATH² ™

Module 4 - Lesson 6:

Compare decimal numbers to the thousandths place.

CCSS Standard – 5.NBT.A.3.b / 5.NBT.A.3

Whiteboard Exchange: Add or Subtract Mixed Numbers

Look at the fractional units.
Do they have **LIKE** units?

No!
Are the units **related?**

Yes!
Which fraction can we
RENAME so the fractional
units, denominators, are
the same?

1/2

$$2\frac{1}{2} + 1\frac{1}{4} = \underline{\qquad}$$

Whiteboard Exchange: Add or Subtract Mixed Numbers

Look at the fractional units.
Do they have LIKE units?

No!
Are the units related?

Yes!
Which fraction can we RENAME so the fractional units, denominators, are the same?

1/3

$$1\frac{1}{3} + 3\frac{5}{6} = \underline{\hspace{2cm}}$$

Look at the fractional units.
Do they have **LIKE** units?

$$3\frac{1}{3} - 1\frac{1}{6} = \underline{\hspace{2cm}}$$

No!
Are the units **related**?

Yes!
Which fraction can we
RENAME so the fractional
units, denominators, are
the same?

1/3

Whiteboard Exchange: Add or Subtract Mixed Numbers

Look at the fractional units. Do they have LIKE units?

No!
Are the units related?

Yes!
Which fraction can we RENAME so the fractional units, denominators, are the same?

1/2

$$4\frac{3}{8} - 1\frac{1}{2} = \underline{\hspace{2cm}}$$

Counting on the Number Line by Tenths

Use the number line to count forward by <u>TENTHS</u> to 1.
Use whole numbers and decimals numbers.
The first number you say is 0. Ready?

Let's continue
counting from 1 to 2
in tenths.

Now let's count
from 6 to 7 in
tenths.

What
number is
HALFWAY
between 1
and 2?

What
number is
HALFWAY
between 6
and 7?

What number is HALFWAY
between 0 and 1?

0

Choral Response: Rename Place Value Units

Raise your hand when you know the answer to each question.
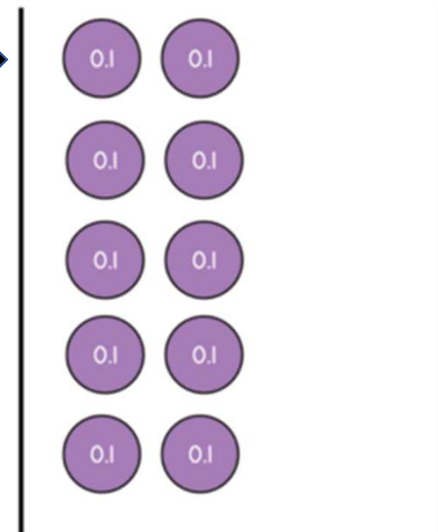**Wait for my signal to say the answer.**

1.0 = **1** one **0** tenths
1.0 = **10** tenths

What value is represented on the chart?
Say the answer in UNIT FORM.

1 one

1 one is equal to how many ones and tenths?

1 one is equal to how many tenths?

Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

1.3 = **1** one **3** tenths
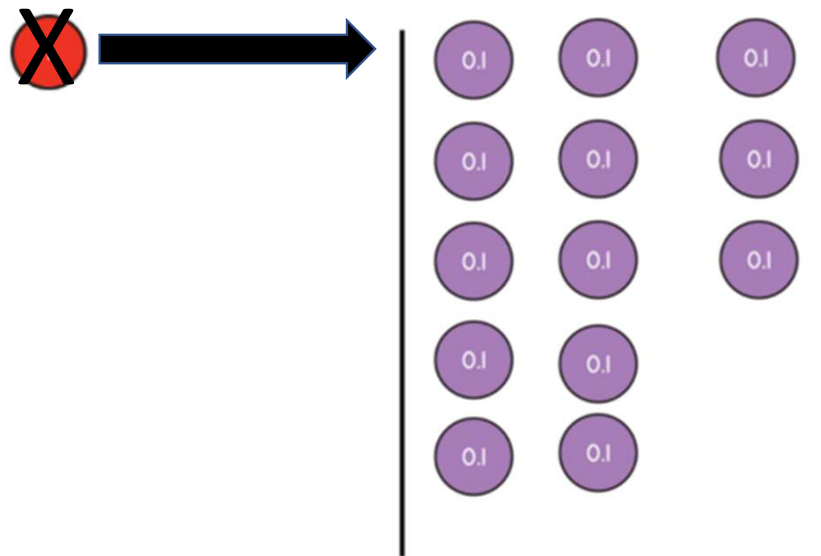1.3 = **13** tenths

What value is represented on the chart?
Say the answer in UNIT FORM.

1 one AND 3 tenths

1.3 is equal to how many ones and tenths?

1.3 is equal to how many tenths?

Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

$$2.5 = \underline{\textbf{2}} \text{ one } \underline{\textbf{5}} \text{ tenths}$$
$$2.5 = \underline{\textbf{25}} \text{ tenths}$$
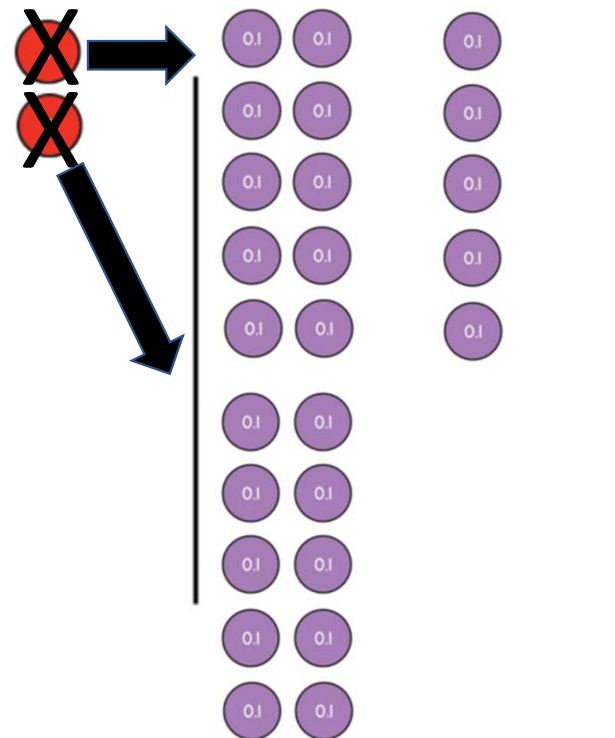
What value is represented on the chart?
Say the answer in UNIT FORM.

2 ones AND 5 tenths

2.5 is equal to how many ones and tenths?

2.5 is equal to how many tenths?

Choral Response: Rename Place Value Units

Raise your hand when you know the answer to each question.
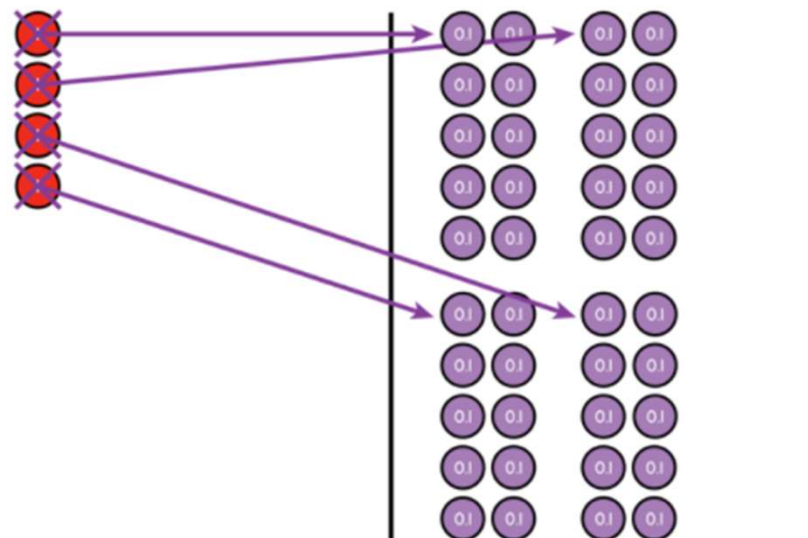**Wait for my signal to say the answer.**

What value is represented on the chart?
Say the answer in UNIT FORM.

4 ones

4 ones is equal to how many ones and tenths?

4 ones is equal to how many tenths?

$4.0 = $ **4** ones **0** tenths

$4.0 = $ **40** tenths

Choral Response: Rename Place Value Units

Raise your hand when you know the answer to each question.
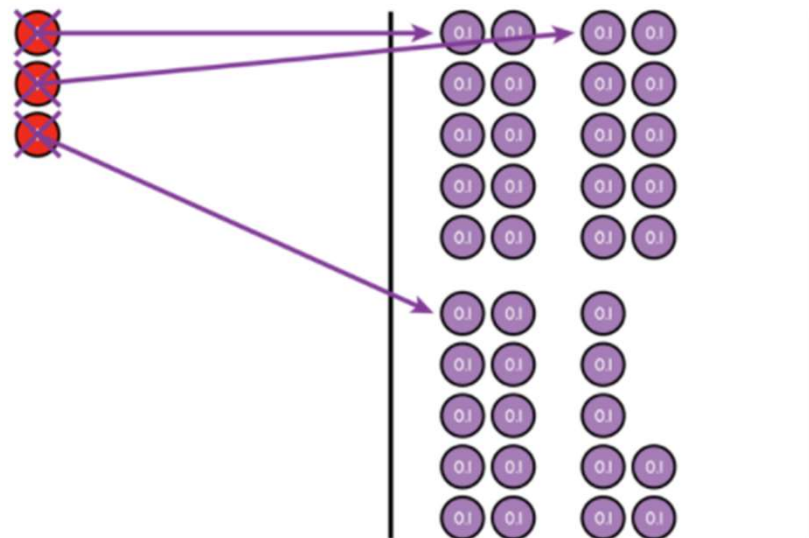**Wait for my signal to say the answer.**

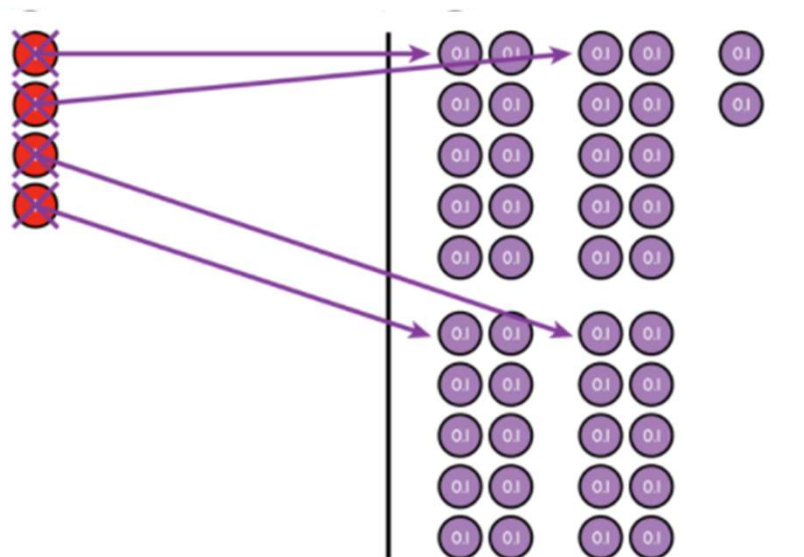$3.7 =$ ___**3**___ ones ___**7**___ tenths
$3.7 =$ ___**37**___ tenths

What value is represented on the chart?
Say the answer in UNIT FORM.

3 ones AND 7 tenths

3.7 is equal to how many ones and tenths?

3.7 is equal to how many tenths?

Raise your hand when you know the answer to each question.
Wait for my signal to say the answer.

$4.2 =$ __**4**__ ones __**2**__ tenths

What **value** is represented on the chart?
Say the answer in UNIT FORM.

$4.2 =$ __**42**__ tenths

4 ones AND 2 tenths

4.2 is equal to how many ones and tenths?

4.2 is equal to how many tenths?

Choose a method to compare decimal numbers to the thousandths place.

The numbers below the baseball players' pictures tell how the players performed when batting over the course of a season. A greater, or larger, number means the player is a better batter.
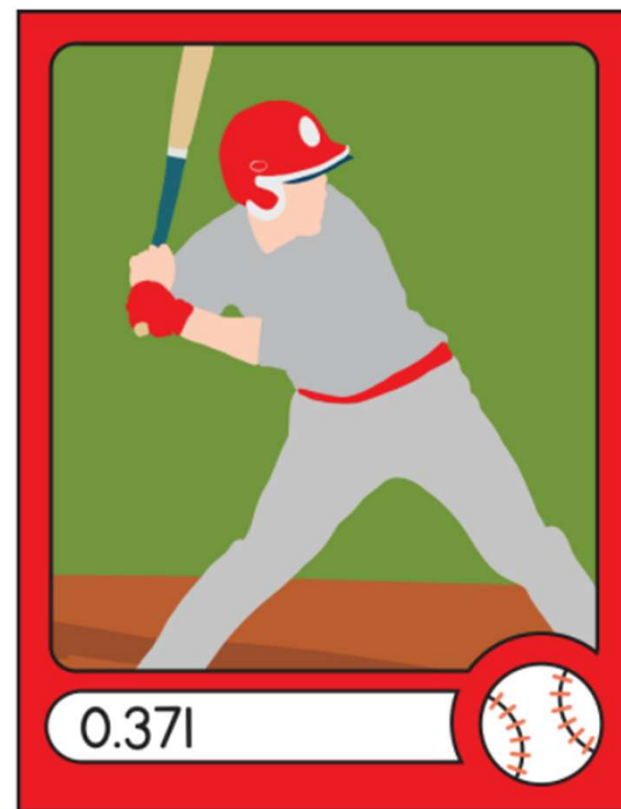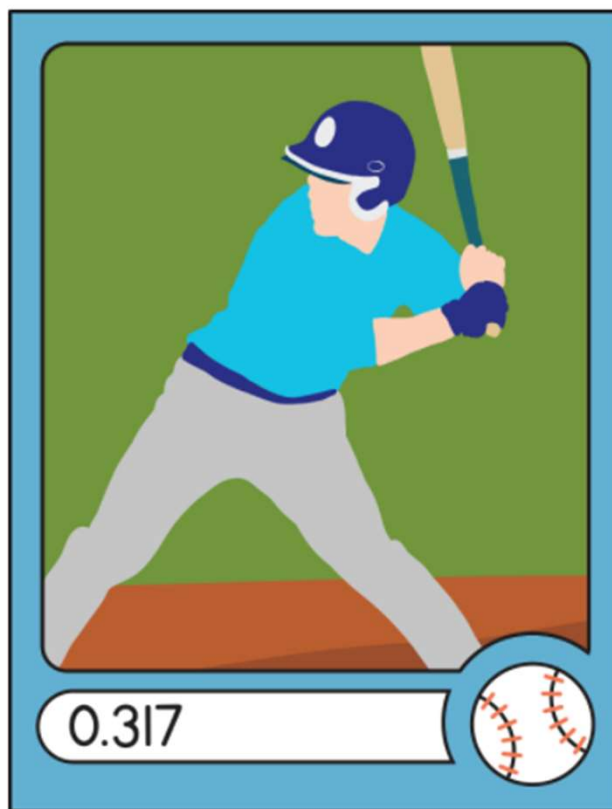
THINK-PAIR-SHARE:
Which card shows a better batting performance? Why?

Use your place value charts to compare them.
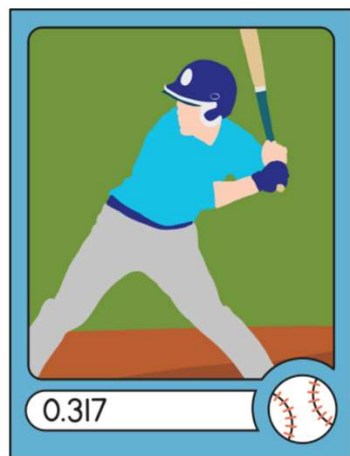
Draw place value disks to represent your answer.

How do you know?

0.317

0.371

Choose a method to compare decimal numbers to the thousandths place.

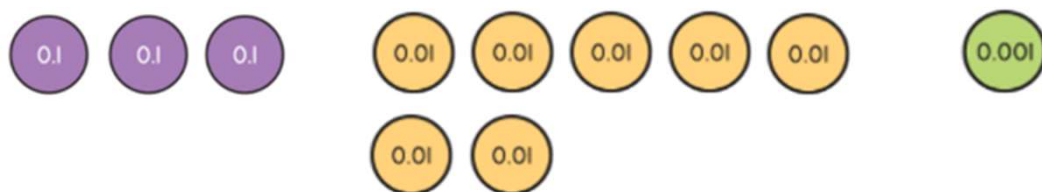**Which card shows a better batting performance? Why?**

0.317

$$\frac{317}{1,000}$$

0.317 < 0.371

0.3**7**1

$$\frac{371}{1,000}$$

Today, we will compare and order decimal numbers to the thousandths place.

LEARN book page 55.
Complete the table and the number line.

What interval is shown in the number line?

0 to 0.01

If the entire number line shows 0.01, then what does each partition represent?

thousandths

1. Complete the table. Then plot and label each number on the number line.

Unit Form	Fraction Form	Standard Form
8 thousandths	$\dfrac{8}{1{,}000}$	0.008
3 thousandths	$\dfrac{3}{1{,}000}$	0.003
9 thousandths	$\dfrac{9}{1{,}000}$	0.009
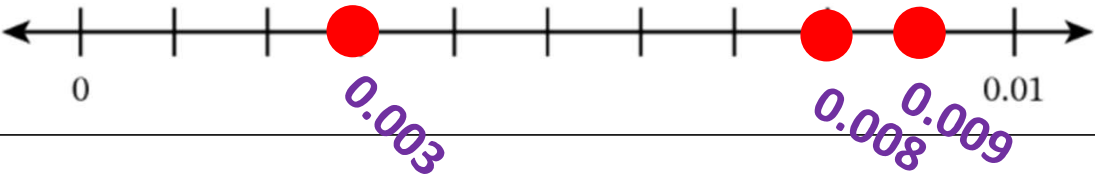
Represent and Compare Decimal Numbers on a Number Line

LEARN book page 55.

Plot and label each number on the number line. Then use >, =, or < to compare the numbers.

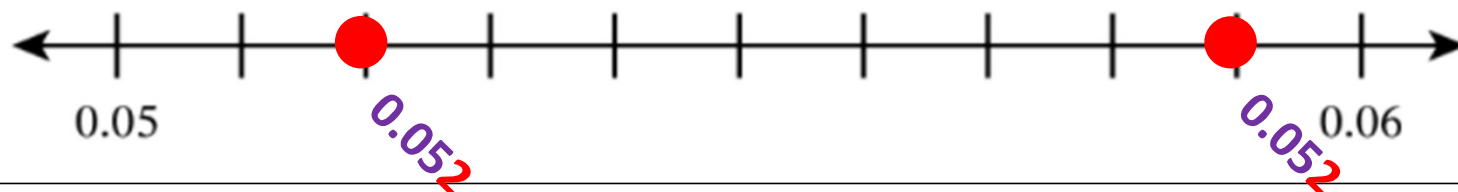2. 0.052 __**<**__ 0.059

What interval is shown in the number line?

0.05 to 0.06

If the entire number line shows 0.01, then what does each partition represent?

thousandths

It is important to understand that 0.05 (five hundredths) is the same as 0.050 (fifty thousandths).
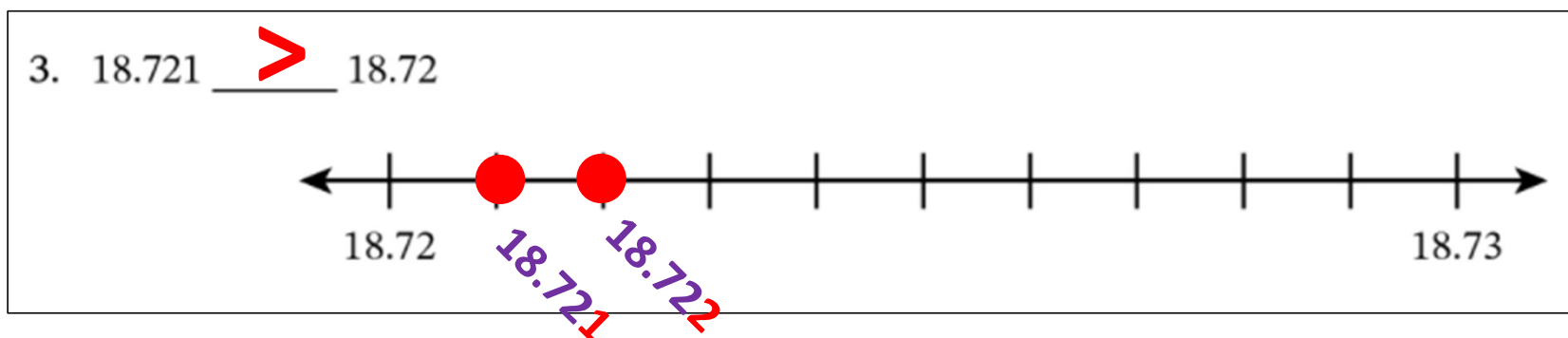**So, as we count on this number line we can say 50 thousandths, 51 thousandths, 52 thousandths ……**

Or we can count, 5 hundredths, then switch to thousandths…. 51 thousandths, 52 thousandths …..

LEARN book page 55.

3. 18.721 ___**>**___ 18.72

18.72   18.721   18.722   18.73

What interval is shown in the number line?

18.72 to 18.73
One hundredth

18.721
18.720

Please Notice This

If the entire number line shows 0.01, then what does each partition represent?

thousandths

LEARN book page 56.

Write each number in the place value chart. Then use >, =, or < to compare the numbers.

4. 92.097 ____**>**____ 92.09

92.097
92.09**0**

Please Notice This

tens	ones	.	tenths	hundredths	thousandths
9	2		0	9	7
9	2		0	9	0

LEARN book page 56.

5.   1.488 **<** 14.88

Please Notice This

1.488
14.88

tens	ones		tenths	hundredths	thousandths
	1	•	4	8	8
1	4	•	8	8	

Represent and Compare Decimal Numbers on a Number Line

LEARN book page 56.

6. Use >, =, or < to compare the numbers.

8.605 __**<**__ 8.65

tens	ones	tenths	hundredths	thousandths
	8	6	0	5
	8	6	5	

8.605
8.65 **Why is it not important to write in the invisible zero here?**

Because our comparison ended with the hundredths place.

Cards – LEARN book page 53
With a partner, order these cards from **LEAST** (lowest) to **GREATEST** (highest).
Use your strategies (place value chart, writing them underneath lining up the decimal, etc.)

0.37

0.374

3.074

3.743	0.374
7.43	3.43
37.43	0.37
3.074	37.431

37.43

37.431

Exit Ticket

TEACHER HELP   QUICK CHECK   GOOD TO GO

Exit Ticket – PAGE 61

Small Group Time:
Problem Set Pages 57 - 59

Homework:
Page 39   APPLY BOOK
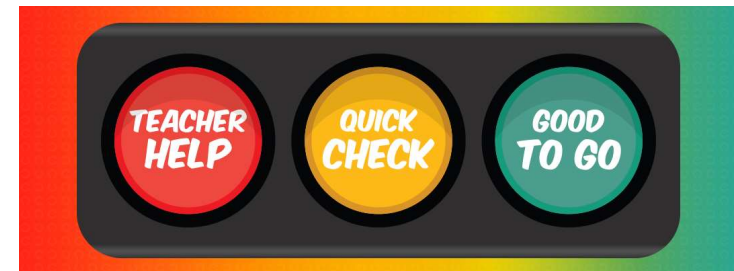
Name _____   Date _____   ✉ 6

1. Use >, =, or < to compare the numbers.

   1.32 _____ 2.14

   1.32 _____ 1.075

   1.32 _____ 1.320

   1.32 _____ 0.884

   1.32 _____ 1.5

2. Order the numbers from least to greatest.

   1.09, 0.987, 1.012, 0.98, 1.1