LESSON MAKER PRO

Decimal Place Detectives

Read, compare, order, and locate decimals to the thousandths.

GRADE 5 · MA.5.NSO.1.4

MA.5.NSO.1.4 "Plot, order and compare multi-digit numbers with decimals up to the thousandths."

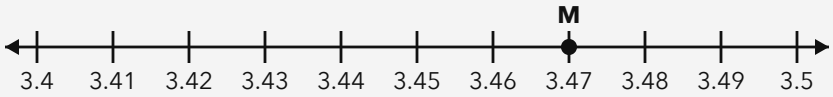
NAME _____ DATE _____

COMPARE DECIMAL PLACES

Line up decimal points, then compare digits from left to right. If digits match, keep moving right until you find different digits. On a number line, the number farther right is greater, and zeros can be added at the end without changing a number.

WORKED EXAMPLE

What decimal does point M represent on the number line?

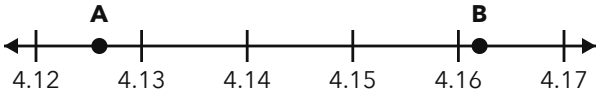


1. Point M is 7 tick marks after 3.40.
2. The tenths digit is 4.
3. The hundredths digit is 7, and the thousandths digit is 0.

Answer: 3.470

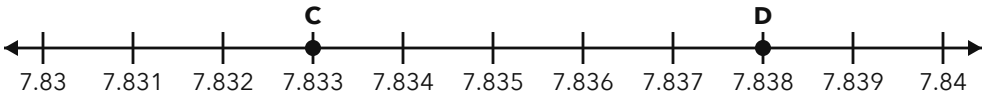
PRACTICE 6 problems

1 Use the number line. Write <, >, or = to compare the two points: A ___ B



ANSWER _____

2 What decimals do points C and D represent on the number line?



ANSWER _____

_____

3 Write <, >, or =. 12.405 ___ 12.450

ANSWER _____

4 Order these decimals from least to greatest: 5.006, 5.06, 5.600, 5.16

ANSWER _____

5 Which decimal is greatest: 10.099, 10.909, or 10.99?

ANSWER _____

6 Order these decimals from greatest to least: 8.015, 8.105, 8.051

ANSWER _____

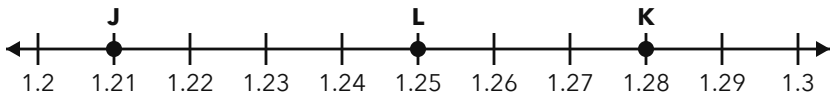
APPLY IT Show your work

1 A game app recorded these loading times in seconds: 0.936, 0.963, and 0.906. List the times from fastest loading time to slowest loading time.

WORK SPACE

ANSWER _____

2 At robotics club, a voltage display shows three sensor readings as points J, K, and L. Write the readings from least to greatest. Which sensor has the greatest reading?



ANSWER _____

CHALLENGE One step up

Order these decimals from least to greatest: 3.507, 3.57, 3.075, 3.705, 3.500. Then explain why 3.500 is less than 3.507.

WORK SPACE AND ANSWER

ANSWER KEY

Decimal Place Detectives

GRADE 5 · MA.5.NSO.1.4

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Use the number line. Write <, >, or = to compare the two points: A ___ B	**4.126 < 4.162**
2	What decimals do points C and D represent on the number line?	**C = 7.833; D = 7.838**
3	Write <, >, or =. 12.405 ___ 12.450	**12.405 < 12.450**
4	Order these decimals from least to greatest: 5.006, 5.06, 5.600, 5.16	**5.006, 5.06, 5.16, 5.600**
5	Which decimal is greatest: 10.099, 10.909, or 10.99?	**10.99**
6	Order these decimals from greatest to least: 8.015, 8.105, 8.051	**8.105, 8.051, 8.015**

PART 2 · APPLY IT

1. **0.906, 0.936, 0.963** A faster loading time is a smaller number of seconds. Compare the tenths, hundredths, and then thousandths digits.
2. **1.210, 1.250, 1.280; sensor K** Read J as 1.210, L as 1.250, and K as 1.280. Points farther right have greater values.

CHALLENGE

3.075, 3.500, 3.507, 3.57, 3.705. Both numbers have 3 ones and 5 tenths. Their hundredths digits are both 0, but 3.500 has 0 thousandths and 3.507 has 7 thousandths, so 3.500 is less.

Accept equivalent decimals with trailing zeros, such as 1.21 for 1.210. For ordered lists, require the requested direction and all numbers included exactly once.