

Comparing Decimals

Goal: Compare decimals.

Vocabulary

Place value:

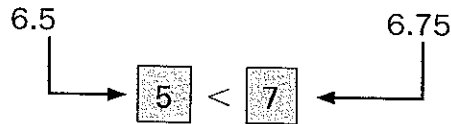
A digit's position in a decimal number relative to the decimal point

EXAMPLE 1 Comparing Positive Decimals

Juice Containers A drink box contains 6.5 fluid ounces of fruit juice, and a drink pouch contains 6.75 fluid ounces of fruit juice. Which container has more juice?

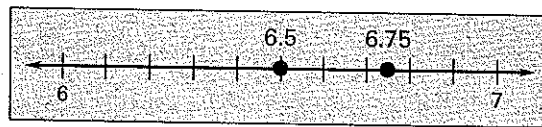
Solution

Method 1 Compare the digits in the place farthest to the left where the decimals have different digits.



Because $5 < 7$, you know that $6.5 < 6.75$.

Method 2 Graph the decimals on a number line.



Because 6.5 lies to the left of 6.75 , you know that $6.5 < 6.75$.

Answer: The drink **pouch** contains more juice.

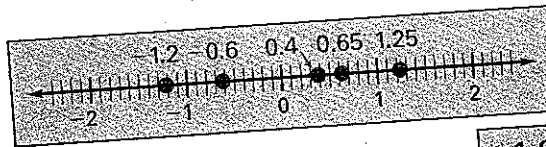
Guided Practice Copy and complete the statement using $<$, $>$, or $=$.

1. $3.48 ? 3.4$	2. $6.35 ? 6.53$	3. $9.15 ? 9.1$
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EXAMPLE 2 Comparing Positive and Negative Decimals

Order 1.25, -0.6, -1.2, 0.4, and 0.65 from least to greatest.

Solution



Answer: The decimals from least to greatest are -1.2 , -0.6 , 0.4 , 0.65 , and 1.25 .

EXAMPLE 3 Multiple Choice Practice

Which list orders the numbers -0.3 , $|-0.6|$, $\frac{4}{5}$, and -0.35 from least to greatest?

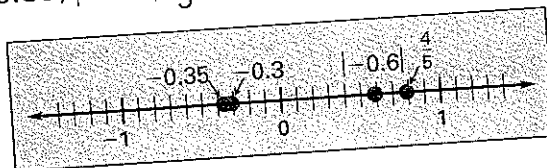
(A) $|-0.6|$, -0.35 , -0.3 , $\frac{4}{5}$

(B) -0.35 , -0.3 , $|-0.6|$, $\frac{4}{5}$

(C) -0.3 , -0.35 , $|-0.6|$, $\frac{4}{5}$

(D) -0.35 , -0.3 , $\frac{4}{5}$, $|-0.6|$

Solution



Answer: The correct answer is **B**.

Guided Practice Order the numbers from least to greatest.

4. 6.4 , -6.35 , 6.4 , -6.3

5. -0.2 , 0.4 , -0.52 , 0.25

6. $\frac{1}{8}$, $|-0.12|$, 0.1 , 0.15

7. 0.5 , $-\frac{3}{4}$, $-|-0.8|$, $\frac{2}{5}$

Homework