



# Unit 2 Lesson 3

## Independent Practice

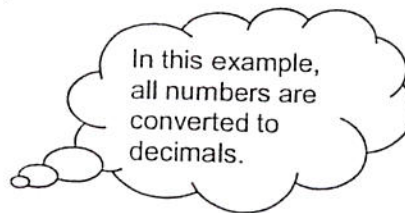
**Comparing and ordering rational numbers:** To compare and order rational numbers, convert all the numbers to the same form – either all fractions or all decimals.

Number lines and models are useful tools when comparing and ordering numbers.

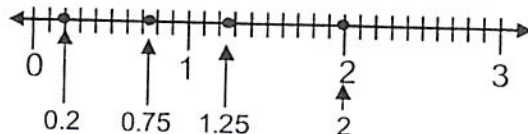
Example: Arrange the numbers in the set  $\{1\frac{1}{4}, 0.75, 2, 0.2\}$  in order from least to greatest.

First, rewrite all number so that they are in the same form.

$$\begin{array}{cccc}
 1\frac{1}{4} & 0.75 & 2 & 0.2 \\
 \downarrow & \downarrow & \downarrow & \downarrow \\
 1.25 & 0.75 & 2 & 0.2
 \end{array}$$

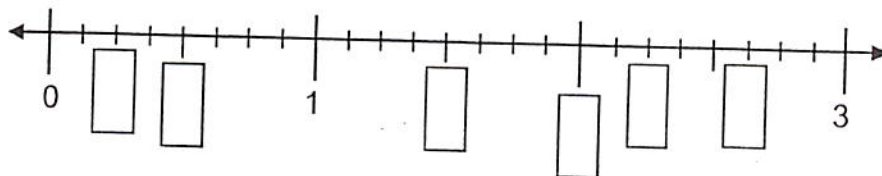


Then place these numbers on a number line:



Therefore, the set  $\{1\frac{1}{4}, 0.75, 2, 0.2\}$  in order from least to greatest is  $\{0.2, 0.75, 1\frac{1}{4}, 2\}$ .

1. Complete the number line below.



2. Anita recorded the height of 5 bean plants in her garden. She recorded her measures in the table below.

Plant Heights

| Plant           | A    | B              | C   | D   | E   |
|-----------------|------|----------------|-----|-----|-----|
| Height (inches) | 1.25 | $2\frac{3}{5}$ | 1.6 | 2.2 | 3.4 |

Arrange these heights in order from least to greatest.



3. Which is the smallest number,  $\frac{21}{25}$ , 0.2, or  $\frac{2}{5}$  ?

4. Which is the largest number,  $\frac{5}{8}$ , 0.6, or 0.06 ?

Complete each comparison using one of the following:  $<$ ,  $>$ , or  $=$ .

5.  $\frac{3}{5} \square 0.8$

6.  $1.75 \square 1\frac{3}{10}$

7.  $\frac{21}{10} \square 2.1$

8.  $\frac{7}{50} \square 0.26$

9. Ray ran the 100 meter dash 5 times during practice. He ran the first trial in 12.4 seconds, the second trial in 12.04 seconds, the third trial in 12.24 seconds, the fourth trial in 12.44 seconds, and the final trial in 12.42 seconds. List Ray's times in order from the fastest time to the slowest time.

10. Janet ordered the list of lengths she measured during her science project. Janet's ordered list is  $6$ ,  $6\frac{14}{25}$ ,  $6\frac{5}{8}$ ,  $7\frac{1}{4}$ ,  $7\frac{3}{10}$ . Candy told her the list was out of order. Janet disagreed and stated that she was placing them in order from least to greatest. Who is right? Justify your answer.