

Comparing and Ordering Decimals

To compare two decimals, line up the decimal points. Beginning at the left, compare the value of the digits in each place. The greater number is the number with greater digit farthest to the left.

The symbol $<$ means *is less than*.

$4.2 < 4.6$

The symbol $>$ means *is greater than*.

$2.7 > 2.3$

The symbol $=$ means *is equal to*.

$3.4 = 3.40$

Compare: 2.6 and 2.3

$\begin{array}{r} \textcircled{2}.\textcircled{6} \\ \textcircled{2}.\textcircled{3} \end{array}$	The ones digits are the same. Compare the tenths.
$6 > 3$, so $2.6 > 2.3$	

Compare: \$0.08 and \$0.25

$\begin{array}{r} \$\textcircled{0}.\textcircled{0}8 \\ \$\textcircled{0}.\textcircled{2}5 \end{array}$	The ones digits are the same. Compare the tenths.
$0 < 2$, so $\$0.08 < \0.25	

Compare 0.4 and 0.47

$\begin{array}{r} \textcircled{0}.\textcircled{4}\textcircled{0} \\ \textcircled{0}.\textcircled{4}\textcircled{7} \end{array}$	Write a zero. The ones and tenths digits are the same. Compare the hundredths.
$0 < 7$, so $0.4 < 0.47$	

Compare the decimals in each pair. Write $<$, $>$, or $=$.

- | | | | |
|-------------------------------------|----------------------------------|--------------------------------|--------------------------------|
| 1. $0.3 \underline{\quad} 0.30$ | 0.5 $\underline{\quad}$ 0.500 | 0.035 $\underline{\quad}$ 0.35 | 0.25 $\underline{\quad}$ 0.3 |
| 2. $3.5 \underline{\quad}$ 3.50 | $4.50 \underline{\quad}$ 4.500 | $0.125 \underline{\quad}$ 13 | $0.15 \underline{\quad}$ 0.115 |
| 3. $0.625 \underline{\quad}$ 0.6250 | $0.035 \underline{\quad}$ 0.0350 | $0.26 \underline{\quad}$ 0.3 | $0.6 \underline{\quad}$ 0.65 |

Write these numbers in order, beginning with the smallest:

4. \$25 \$2.50 \$0.25 \$1.25 \$1.02 \$1.20 \$1.10 \$1.01 _____

If the numbers in each pair below are the same, write S on the line. If they are not the same, write D on the line:

- | | | | |
|---|---|---|---|
| 5. One hundred twenty-five — $0.125 \underline{\quad}$ D | Three fourths — $0.34 \underline{\quad}$ | | |
| 6. One and six tenths — $1.6 \underline{\quad}$ | Four twenty-fifths — $4.25 \underline{\quad}$ | | |
| 7. Thirty-five and one half — $35.2 \underline{\quad}$ | Eight thousandths — $0.008 \underline{\quad}$ | | |
| 8. Ten and one fifth — $10.5 \underline{\quad}$ | Five and one tenth — $5.10 \underline{\quad}$ | | |
| 9. $\frac{1}{10} \underline{\quad}$ 0.01 | $\frac{5}{10} \underline{\quad}$ 0.5 | $\frac{90}{10} \underline{\quad}$ 0.9 | $\frac{2}{10} \underline{\quad}$ 2.0 |
| 10. $\frac{7}{100} \underline{\quad}$ 0.7 | $\frac{24}{100} \underline{\quad}$ 0.24 | $\frac{1}{100} \underline{\quad}$ 0.01 | $\frac{130}{100} \underline{\quad}$ 0.13 |
| 11. $\frac{82}{100} \underline{\quad}$ 0.082 | $\frac{33}{100} \underline{\quad}$ 0.003 | $\frac{60}{100} \underline{\quad}$ 0.6 | $\frac{4}{100} \underline{\quad}$ 0.4 |
| 12. $\frac{9}{1,000} \underline{\quad}$ 0.09 | $\frac{42}{1,000} \underline{\quad}$ 0.42 | $\frac{500}{1,000} \underline{\quad}$ 0.5 | $\frac{110}{1,000} \underline{\quad}$ 1.1 |

13. The last digit on all speedometers expresses tenths. The speedometer on Clark's car has five 9's. Express this mileage in decimal form. _____
14. When his car goes another one tenth of a mile, what will the speedometer read? _____

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Answer Key

1. = = < <

2. = = < >

3. = = < <

4. \$0.25, \$1.01, \$1.02, \$1.10,
\$1.20, \$1.25, \$2.50, \$25

5. D D

6. S D

7. D S

8. D S

9. D S D D

10. D S S D

11. D D S D

12. D D S D

13. 9,999.9 miles

14. 10,000.0 miles

