

Your scratch work is due today for the Khan that was due last night.

Have it ready to turn in when I come around.

Make sure your name is on it 😊



# DIVIDING DECIMALS BY WHOLE NUMBERS

GUIDED NOTES

## IMPORTANT VOCABULARY:

- **Dividend:** The amount being divided into
- **Divisor:** The number by which another number is being divided
- **Quotient:** The answer to a division problem.

$$\begin{array}{r} 36.33 \\ 9 \overline{) 327.00} \\ \underline{-27} \phantom{00} \\ 57 \phantom{00} \\ \underline{-54} \phantom{00} \\ 30 \phantom{00} \\ \underline{-27} \phantom{00} \\ 30 \phantom{00} \end{array}$$

## DIVIDING DECIMALS BY WHOLE NUMBERS

1. Dividing decimals is similar to dividing whole numbers.
2. When you divide a decimal by a whole number, place the decimal in the quotient.
3. Then divide as you would normally divide whole numbers.

## TO DIVIDE TWO NUMBERS:

D. Divide

M. Multiply

S. Subtract

C. Check

B. Bring Down

## GUIDED PRACTICE

What is 4.56 divided by 2?

$$\begin{array}{r} 2.28 \\ 2 \overline{) 4.56} \\ \underline{-4} \phantom{00} \\ 05 \phantom{00} \\ \underline{-4} \phantom{00} \\ 16 \phantom{00} \\ \underline{-16} \phantom{00} \\ 0 \end{array}$$

What is 23.1 divided by 14?

$$\begin{array}{r} 1.65 \\ 14 \overline{) 23.10} \\ \underline{-14} \phantom{00} \\ 91 \phantom{00} \\ \underline{-84} \phantom{00} \\ 70 \phantom{00} \\ \underline{-70} \phantom{00} \\ 0 \end{array}$$

Name: \_\_\_\_\_

Date: \_\_\_\_\_



# DIVIDING DECIMALS BY WHOLE NUMBERS

PRACTICE PROBLEMS

#1  $57.6 \div 6$

$$\begin{array}{r}
 9.6 \\
 6 \overline{) 57.6} \\
 \underline{-54} \phantom{.} \phantom{0} \\
 36 \\
 \underline{-36} \\
 0
 \end{array}$$

#2  $62.4 \div 4$

$$\begin{array}{r}
 15.6 \\
 4 \overline{) 62.4} \\
 \underline{-4} \phantom{.} \phantom{0} \\
 22 \\
 \underline{-20} \phantom{0} \\
 24 \\
 \underline{-24} \\
 0
 \end{array}$$

#3  $57.76 \div 8$

$$\begin{array}{r}
 7.22 \\
 8 \overline{) 57.76} \\
 \underline{-56} \phantom{.} \phantom{0} \\
 17 \\
 \underline{-16} \phantom{0} \\
 16 \\
 \underline{-16} \\
 0
 \end{array}$$

#4  $40.7 \div 11$

$$\begin{array}{r}
 3.7 \\
 11 \overline{) 40.7} \\
 \underline{-33} \phantom{0} \\
 77 \\
 \underline{-77} \\
 0
 \end{array}$$

#5  $113.6 \div 20$

$$\begin{array}{r}
 5.68 \\
 20 \overline{) 113.60} \\
 \underline{-100} \phantom{0} \\
 136 \\
 \underline{-120} \phantom{0} \\
 160 \\
 \underline{-160} \\
 0
 \end{array}$$

#6  $140.4 \div 18$

$$\begin{array}{r}
 7.8 \\
 18 \overline{) 140.4} \\
 \underline{-126} \phantom{0} \\
 144 \\
 \underline{-144} \\
 0
 \end{array}$$

#7 Jessica makes \$9.00 an hour babysitting her sister. If Jessica made \$38.25, how many hours did she babysit?

**Jessica babysat for 4 and  $\frac{1}{4}$  hours.**

**4 hours, 15 minutes.**

$$\begin{array}{r}
 4.25 \\
 9 \overline{) 38.25} \\
 \underline{-36} \phantom{0} \\
 22 \\
 \underline{-18} \\
 45 \\
 \underline{-45} \\
 0
 \end{array}$$

Homework is on Khan Academy. Scratch work required!!!

Name: \_\_\_\_\_

Date: \_\_\_\_\_



# DIVIDING DECIMALS BY DECIMALS

GUIDED NOTES

## IMPORTANT VOCABULARY:

- **Dividend:** The amount being **divided**.
- **Divisor:** The number by which another number is being **divided**.
- **Quotient:** The answer to a **division** problem.

## DIVIDING DECIMALS BY DECIMALS

1. To divide a decimal by another decimal, **rewrite** the divisor as a whole number.
2. To do this, move the decimal of the divisor to the **right** until it is a whole number.
3. Then, move the decimal in the **dividend** the same number of spaces to the right.
4. You may need to add **zeros**.
5. **Rewrite** the problem so you don't get confused.

## GUIDED PRACTICE

### Dividing Decimals by Decimals

- Move the decimal of the divisor to the right until it is a whole number.
- Move the decimal in the dividend the same number of spaces to the right.
- Add zeros if necessary
- Rewrite the problem and solve.

What is the quotient of 12.48 and 0.8?

$$\begin{array}{r} 15.6 \\ 0.8 \overline{) 12.48} \\ \underline{-8} \phantom{0} \\ 44 \phantom{0} \\ \underline{-40} \phantom{0} \\ 48 \\ \underline{-48} \\ 0 \end{array}$$

What is the quotient of 63.7 and 2.6?

$$\begin{array}{r} 24.5 \\ 2.6 \overline{) 63.70} \\ \underline{-52} \phantom{0} \\ 117 \phantom{0} \\ \underline{-104} \phantom{0} \\ 130 \\ \underline{-130} \\ 0 \end{array}$$
  
$$\begin{array}{r} 26 \\ \times 4 \\ \hline 104 \end{array}$$



# DIVIDING DECIMALS BY DECIMALS

PRACTICE PROBLEMS

#1 What is 9.14 divided by 0.04?

$$\begin{array}{r} 228.5 \\ 0.04 \overline{) 9.140} \\ \underline{-8} \phantom{0} \\ 11 \phantom{0} \\ \underline{-8} \phantom{0} \\ 34 \phantom{0} \\ \underline{-32} \\ 20 \end{array}$$

#2 What is 0.382 divided by 0.8?

$$\begin{array}{r} 0.4775 \\ 0.8 \overline{) 0.38200} \\ \underline{-32} \phantom{00} \\ 62 \phantom{0} \\ \underline{-56} \phantom{0} \\ 60 \phantom{0} \\ \underline{-56} \\ 40 \phantom{0} \\ \underline{-40} \\ 0 \end{array}$$

#3 What is the quotient of 47.936 and 0.56?

$$\begin{array}{r} 85.6 \\ 0.56 \overline{) 47.936} \\ \underline{-44} \phantom{8} \\ 313 \phantom{6} \\ \underline{-280} \\ 336 \\ \underline{-336} \\ 0 \end{array}$$

#4 What is the quotient of 82.488 and 0.982?

$$\begin{array}{r} 84. \\ 0.982 \overline{) 82.488} \\ \underline{-78} \phantom{56} \\ 3928 \\ \underline{-3928} \\ 0 \end{array}$$

$$\begin{array}{r} 4 \\ 56 \\ \times 8 \\ \hline 448 \end{array}$$

$$\begin{array}{r} 3 \\ 56 \\ \times 5 \\ \hline 280 \\ + 280 \\ \hline 536 \end{array}$$

$$\begin{array}{r} 6 \\ 982 \\ \times 8 \\ \hline 7856 \end{array}$$

#5  $681.5 \div 7.25$

$$\begin{array}{r} 94. \\ 7.25 \overline{) 681.50} \\ \underline{-652} \phantom{5} \\ 2900 \\ \underline{-2900} \\ 0 \end{array}$$

#6  $19.4568 \div 2.01$

$$\begin{array}{r} 9.68 \\ 2.01 \overline{) 19.4568} \\ \underline{-18} \phantom{09} \\ 1366 \\ \underline{-1206} \\ 1608 \\ \underline{-1608} \\ 0 \end{array}$$

#7 Joshua spent \$22.68 on apples. If apples cost \$1.89 a pound, how many

many

pounds did he buy?

$$\begin{array}{r} 11 \\ 22.6 \\ \underline{-18.9} \\ 3.7 \end{array}$$

$$\begin{array}{r} 189 \\ \times 2 \\ \hline 378 \end{array}$$

$$\begin{array}{r} 12. \\ 1.89 \overline{) 22.68} \\ \underline{-189} \\ 378 \\ \underline{-378} \\ 0 \end{array}$$

12 pounds

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