

Name: _____

Core: _____

Dividing Decimals Homework

Due Thursday, March 2nd

Example: Divide 9.1 by 7

Ignore the decimal point and use Long Division:

$$\begin{array}{r} \underline{13} \\ 7 \overline{)91} \\ \underline{7} \\ 21 \\ \underline{21} \\ 0 \end{array}$$

Put the decimal point in the answer directly above the decimal point in the dividend:

$$\begin{array}{r} \underline{1.3} \\ 7 \overline{)9.1} \end{array}$$

The answer is 1.3

Try it on your own

1. $44.2 \div 4 = ?$

2. $15.5 \div 5 = ?$

Example: Divide 6.4 by 0.4

We are **not** dividing by a whole number, so we need to move the decimal point so we are dividing by a whole number:

$$\begin{array}{l} \text{move 1} \\ 6.4 \Rightarrow 64 \\ 0.4 \Rightarrow 4 \\ \text{move 1} \end{array}$$

6.4/0.4 is exactly the same as 64/4,
as we moved the decimal point of **both** numbers.

Now we can calculate:

$$64 / 4 = 16$$

So the answer is:

$$6.4 / 0.4 = 16$$

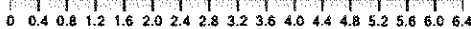
Try it on your own

3. $5.6 \div 7 = ?$

4. $14.4 \div 1.2 = ?$

5. $0.45 \div 0.5 = ?$

Are there really 16 lots of 0.4 in 6.4? Let's see:



Example: Divide 5.39 by 1.1

Move the decimal point so that we are dividing by a whole number:

$$\begin{array}{l} \text{move 1} \\ 5.39 \rightarrow 53.9 \\ 1.1 \rightarrow 11 \\ \text{move 1} \end{array}$$

We are now dividing by a whole number, so we can go ahead:

Ignore the decimal point and use Long Division:

$$\begin{array}{r} \underline{049} \\ 11 \overline{)539} \\ \underline{0} \\ 53 \\ \underline{44} \\ 99 \\ \underline{99} \\ 0 \end{array}$$

Put the decimal point in the answer directly above the decimal point in the dividend:

$$\begin{array}{r} \underline{04.9} \\ 11 \overline{)53.9} \end{array}$$

The answer is 4.9

Try it on your own

6. $60 \div 0.12 = ?$

7. $7.2 \div 0.09 = ?$

8. $150 \div 2.5 = ?$

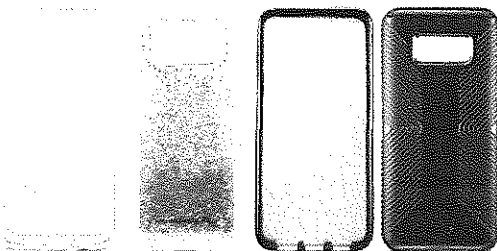
Percent Word Problems

You can use a calculator, but write down the math expression you typed into the calculator to show your work.



1. Cameron wants to celebrate National Pizza Pie Day with a family size Hawaiian pizza. Papa Murphy's offers 25 % off all pizzas on National Pizza Pie Day {January 25th}. The pizza originally costs \$ 17, so how much will it cost Cameron on sale?

2. An advertisement in the Target Flyer



20% off

All cases for Samsung Galaxy S8 and S8+
• 30% off all cases for Samsung Galaxy S7.
Styles and colors vary by store.

McKayla wants to buy a new Galaxy S8 case and finds one that costs \$15.99. How much will it cost after the 20 % off sale?

EXTRA 25% OFF SALE STYLES

Discount applied at checkout, enter code 25OFF

Sale ends 11/15/11 at 11:59 PM PST

Learn More

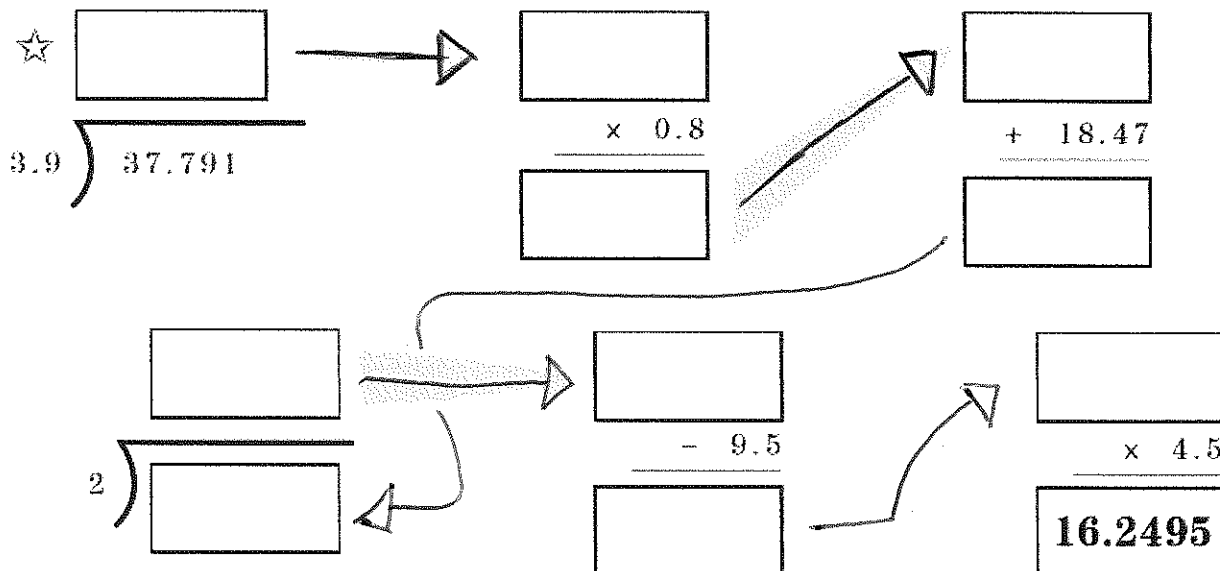
3. Nike Online has a 25 % off sale. Lamarcus picks out a new hat for \$22 and picks up 2 graphic t-shirts for \$30. How much does he pay after the 25 % off sale?

4. Last Friday, 86% of Olson students came to school. There are 365 students enrolled at Olson Middle School. How many students did not show up for school last Friday?

5. There are 121 6th graders at Olson Middle School. Only 38.8 % of the 6th graders are girls. What is the number of Olson 6th grade boys and girls each?

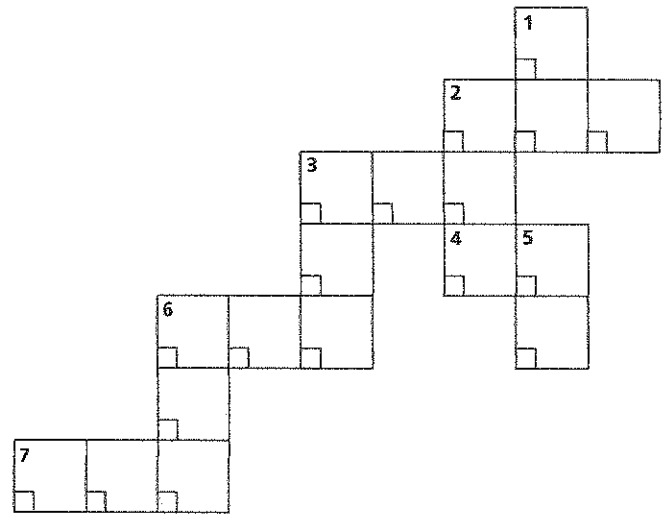
Advanced Learner Problem {Extra Credit}

Begin at the ☆. Solve the division problem and write your answer in the box directly above the problem. Follow the arrow to the next box and copy your answer from the first box. Solve the next problem, follow the arrow, and copy your new answer in the next open box. Continue to solve the problems, copying each answer into the next box indicated by the arrow. When you've finished the puzzle correctly, your final answer should be the exact number needed to solve the final problem. Go on to the second puzzle and follow the same steps you used to work your way through the first one!



CROSS-NUMBER
27
PUZZLE

50% OF 60 IS N. Solve the problems and express each answer as a decimal. Write your answers in the appropriate across and down positions.



ACROSS

- 2. 51% of 60 =
- 3. 51% of 70 =
- 4. 90% of 60 =
- 6. 85% of 90 =
- 7. 44% of 110 =

DOWN

- 1. 50% of 60 =
- 2. 15% of 25 =
- 3. 55% of 70 =
- 5. 80% of 60 =
- 6. 56% of 140 =