

Name: _____

Core: _____

Homework: Multiplying Fractions
Due Wednesday, February 14th

Classwork

Method 1: Insert decimal point after multiplying.

Example 1:

$$\begin{array}{r} 3 \\ \times 0.4 \\ \hline 1.2 \end{array}$$

<- 0 places to right of decimal
<- 1 place to right of decimal
<- Add up number of decimals to right, in this case 0+1 = 1
Answer will have 1 number to the right of decimal.

One and two tenths

Example 2:

$$\begin{array}{r} 1.3 \\ \times 0.6 \\ \hline 0.18 \\ + 0.60 \\ \hline 0.78 \end{array}$$

<-1 place to right of decimal
<-1 place to right of decimal
Add up number of decimals to right, in this case 1+1 = 2
<- Answer will have 2 numbers to the right of decimal.

Zero and seventy-eight hundredths

Try it on your own:

You have 7 quarters, how much is that?

\$0.25

$$\begin{array}{r} \times \quad 7 \\ \hline \end{array}$$

Answer in words:

Jeff worked 3.5 hours today and earns \$9.50 an hour. How much did he earn today?

\$9.50

$$\begin{array}{r} \times \quad 3.5 \\ \hline \end{array}$$

Answer in words:

Five friends bring \$1.25 for snacks.

How much do they have in total?

\$1.25

$$\begin{array}{r} \times \quad 5 \\ \hline \end{array}$$

Answer in words:

Mr. Kennedy works afterschool for a total of four hours every two weeks. How much does he make every two weeks if he is paid \$36.09 an hour?

\$36.09

$$\begin{array}{r} \times \quad 4 \\ \hline \end{array}$$

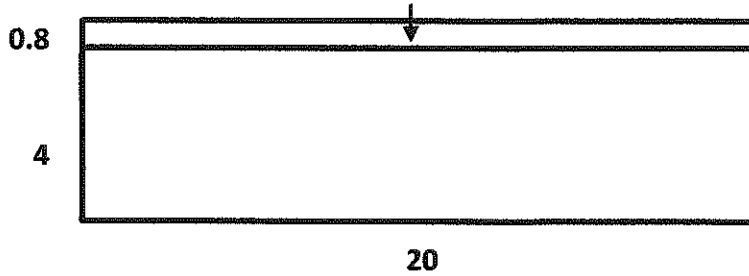
Answer in words:

Method 2: Solve the following problem using partial products.

What is a partial product? Partial product means you break the numbers into pieces – whole numbers and decimals (or fractions). Then you can add the partial products together because of the Distributive Property.

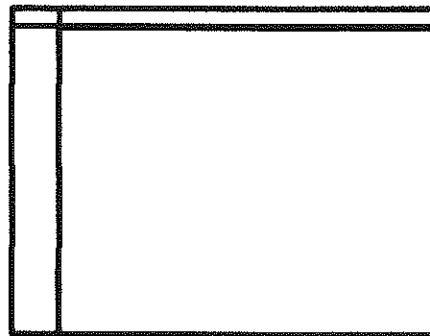
$$20 \times 4.8 =$$

$$\begin{array}{r} 20 \\ \times 4 \\ \hline \end{array} \qquad \begin{array}{r} 20 \\ \times 0.8 \\ \hline \end{array}$$



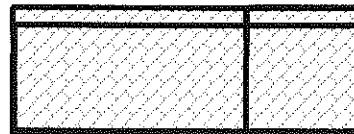
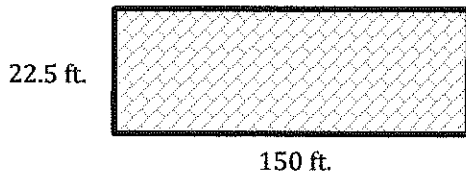
$$4.5 \times 3.4 =$$

$$\begin{array}{r} 4 \\ \times 3 \\ \hline \end{array} \qquad \begin{array}{r} 4 \\ \times 0.4 \\ \hline \end{array} \qquad \begin{array}{r} 3 \\ \times 0.5 \\ \hline \end{array} \qquad \begin{array}{r} 0.5 \\ \times 0.4 \\ \hline \end{array}$$



Homework Problems

1. Use partial products to calculate the area of the rectangular patio shown below.



Calculate the product using partial products. Must show work to prove you can multiply decimals, so no calculators!

2. 10.5×4.2

4. 200×38.4

3. 18.8×34.5

5. 900×20.7

Solve the following problems using Method 1 or Method 2. Show your work, no calculators!

6. Jayla makes \$10.75 per hour babysitting on the weekends.

If she babysat for 6 hours this past weekend, how much money did she make?

7. Amir's cat weighs 2.6 kilograms. His dog weighs 4 times as much as his cat.

How much does his dog weigh in kilograms?

8. Baby Loella plays with blocks. Each block is 3.7 inches tall. She has a collection of 41 blocks. If she could stack all of the blocks up one on top of the other, how many inches tall would her tower of blocks be?

9. Aaron buys t-shirts in bulk for his custom t-shirt business. The t-shirts cost \$5.95 each and come in packs of 25 t-shirts. How much money does 2 packs of t-shirts cost him?

10. Makayla rides the Metro Transit bus to and from work each day during rush hour. A one-way trip is \$2.50 during rush hour. How much does Makayla spend on bus fare during a 5-day work week?

Extended Learning Problem (Extra Green Ticket!)

Equivalent Fraction Match

In the grid below, there are 13 columns of fractions with a fraction at the top of each column. Shade in all of the boxes directly below the fraction that have an equivalent value to the top fraction. You will decode an answer to the following question:



What four letters did the crowd chant to the man who had been in the ring with the professional wrestler?

$\frac{1}{4}$	$\frac{2}{5}$	$\frac{3}{8}$	$\frac{1}{3}$	$\frac{4}{6}$	$\frac{1}{5}$	$\frac{1}{2}$	$\frac{7}{9}$	$\frac{1}{8}$	$\frac{2}{3}$	$\frac{3}{5}$	$\frac{7}{10}$	$\frac{3}{4}$
$\frac{5}{6}$	$\frac{4}{16}$	$\frac{18}{32}$	$\frac{3}{9}$	$\frac{14}{24}$	$\frac{7}{35}$	$\frac{4}{9}$	$\frac{15}{18}$	$\frac{2}{19}$	$\frac{4}{5}$	$\frac{6}{15}$	$\frac{10}{30}$	$\frac{5}{8}$
$\frac{4}{9}$	$\frac{4}{6}$	$\frac{6}{12}$	$\frac{7}{21}$	$\frac{10}{18}$	$\frac{3}{15}$	$\frac{1}{8}$	$\frac{2}{3}$	$\frac{4}{24}$	$\frac{8}{12}$	$\frac{12}{18}$	$\frac{3}{5}$	$\frac{9}{12}$
$\frac{3}{8}$	$\frac{6}{10}$	$\frac{7}{9}$	$\frac{5}{15}$	$\frac{1}{3}$	$\frac{2}{10}$	$\frac{4}{9}$	$\frac{3}{5}$	$\frac{1}{2}$	$\frac{12}{18}$	$\frac{7}{9}$	$\frac{14}{20}$	$\frac{1}{2}$
$\frac{3}{12}$	$\frac{8}{20}$	$\frac{12}{32}$	$\frac{4}{12}$	$\frac{4}{5}$	$\frac{5}{25}$	$\frac{7}{13}$	$\frac{21}{28}$	$\frac{2}{5}$	$\frac{4}{6}$	$\frac{12}{20}$	$\frac{1}{2}$	$\frac{6}{12}$
$\frac{7}{28}$	$\frac{15}{18}$	$\frac{18}{48}$	$\frac{6}{18}$	$\frac{8}{12}$	$\frac{4}{20}$	$\frac{4}{8}$	$\frac{14}{18}$	$\frac{4}{32}$	$\frac{10}{15}$	$\frac{6}{10}$	$\frac{15}{30}$	$\frac{2}{3}$
$\frac{2}{8}$	$\frac{6}{15}$	$\frac{6}{16}$	$\frac{4}{9}$	$\frac{2}{5}$	$\frac{4}{8}$	$\frac{7}{14}$	$\frac{28}{32}$	$\frac{2}{16}$	$\frac{6}{9}$	$\frac{4}{16}$	$\frac{35}{50}$	$\frac{7}{16}$
$\frac{5}{20}$	$\frac{4}{10}$	$\frac{9}{16}$	$\frac{3}{6}$	$\frac{12}{16}$	$\frac{6}{28}$	$\frac{10}{20}$	$\frac{4}{6}$	$\frac{3}{24}$	$\frac{16}{24}$	$\frac{6}{9}$	$\frac{27}{40}$	$\frac{6}{8}$
$\frac{6}{24}$	$\frac{10}{30}$	$\frac{15}{40}$	$\frac{10}{45}$	$\frac{18}{30}$	$\frac{6}{35}$	$\frac{3}{6}$	$\frac{3}{4}$	$\frac{6}{48}$	$\frac{6}{8}$	$\frac{8}{25}$	$\frac{3}{4}$	$\frac{4}{8}$
$\frac{4}{16}$	$\frac{6}{20}$	$\frac{6}{24}$	$\frac{2}{6}$	$\frac{9}{12}$	$\frac{4}{16}$	$\frac{5}{10}$	$\frac{21}{27}$	$\frac{5}{40}$	$\frac{10}{24}$	$\frac{9}{20}$	$\frac{21}{35}$	$\frac{8}{20}$