Warm Up Grade 8

Sept. 16

Multiply

a) 7 x 23

$$\begin{array}{r} {\scriptstyle 2}\,2\,3 \\ \times \quad\;\; 7 \\ \hline 1\,6\,1 \end{array}$$

b) 45 x 17

$$\begin{array}{r} {\scriptstyle 3}\,4\,5 \\ \times \quad 1\,7 \\ \hline 3\,1\,5 \\ +\;4\,5\,0 \\ \hline 7\,6\,5 \end{array}$$

KEY

2-Digit by 1-Digit Multiplication (A)

Use the grid to help you multiply each pair of factors.

	2	
	5	3
×		9
4	7	7

	9	3
×		3
2	7	9

	4	
	8	9
×		5
4	4	5

	2	
	7	3
×		7
5	1	1

	9	0
×		4
3	6	0

	3	
	3	7
×		5
1	8	5

	7	
	5	9
×		8
4	7	2

	4	
	3	6
×		8
2	8	8

	1	
	9	2
×		7
6	4	4

	4	
	9	7
×		7
6	7	9

	3	
	1	5
×		6
	9	0

	6	
	9	7
×		9
8	7	3

	2	
	2	4
×		7
1	6	8

	2	1
×		2
	4	2

	1	
	1	6
×		3
	4	8

	4	
	4	6
×		7
3	2	2

	2	1
×		3
	6	3

	3	
	9	5
×		6
5	7	0

	1	
	2	2
×		8
1	7	6

	1	
	6	6
×		3
1	9	8

	4	0
×		3
1	2	0

	4	3
×		3
1	2	9

	2	
	3	4
×		6
2	0	4

	2	
	5	9
×		3
1	7	7

	8	
	5	9
×		9
5	3	1

	5	
	4	8
×		7
3	3	6

	3	
	8	7
×		5
4	3	5

	6	1
×		3
1	8	3

	2	
	1	5
×		4
	6	0

	3	
	1	7
×		5
	8	5

2-Digit by 2-Digit Multiplication (A) KEY

Use the grid to help you multiply each pair of factors.

		8	2
	×	4	1
		8	2
+ 3	2	8	0
3	3	6	2

		4	4
	×	4	2
		8	8
+ 1	7	6	0
1	8	4	8

		2	5
	×	1	0
		0	0
+	2	5	0
	2	5	0

		9	3
	×	8	6
	5	5	8
+ 7	4	4	0
7	9	9	8

		7	2
	×	8	7
	5	0	4
+ 5	7	6	0
6	2	6	4

		4	3
	×	1	0
		0	0
+	4	3	0
	4	3	0

		6	2
	×	5	2
	1	2	4
+ 3	1	0	0
3	2	2	4

		5	6
	×	9	6
	3	3	6
+ 5	0	4	0
5	3	7	6

		9	1
	×	4	7
	6	3	7
+ 3	6	4	0
4	2	7	7

		9	4
	×	8	3
	2	8	2
+ 7	5	2	0
7	8	0	2

		7	5
	×	1	3
	2	2	5
+	7	5	0
	9	7	5

		3	4
	×	9	8
	2	7	2
+ 3	0	6	0
3	3	3	2

		2	3
	×	4	8
	1	8	4
+	9	2	0
1	1	0	4

		4	4
	×	6	2
		8	8
+ 2	6	4	0
2	7	2	8

		7	9
	×	9	7
	5	5	3
+ 7	1	1	0
7	6	6	3

		9	9
	×	6	5
	4	9	5
+ 5	9	4	0
6	4	3	5

2-Digit by 2-Digit Multiplication (A)

Name: Key Date: Score: /20

Calculate each product.

14 × 83 = 1162	93 × 65 = 6045	82 × 60 = 4920	77 × 11 = 847	52 × 80 = 4160
24 × 83 = 1992	49 × 55 = 2695	13 × 18 = 234	35 × 61 = 2135	15 × 51 = 765
92 × 32 = 2944	25 × 65 = 1625	25 × 67 = 1675	96 × 17 = 1632	24 × 11 = 264
60 × 21 = 1260	13 × 34 = 442	28 × 53 = 1484	37 × 76 = 2812	57 × 57 = 3249

3-Digit by 2-Digit Multiplication (A)

Name: Key Date: Score: /20

Calculate each product.

435 × 72 = 31320	325 × 54 = 17550	804 × 79 = 63516	908 × 47 = 42676	905 × 80 = 72400
394 × 71 = 27974	977 × 45 = 43965	256 × 32 = 8192	989 × 55 = 54395	284 × 81 = 23004
183 × 38 = 6954	592 × 78 = 46176	501 × 36 = 18036	428 × 57 = 24396	640 × 54 = 34560
788 × 49 = 38612	205 × 15 = 3075	422 × 97 = 40934	169 × 48 = 8112	891 × 87 = 77517

You multiply decimals the same way you multiply whole (LINE UP LAST NUMBER), IGNORE the decimal until the final answer but you have to remember to put the decimal in the proper position in your answer.

$$\begin{array}{rl} 7.25 & \longrightarrow \text{2 decimal places} \\ \times 1.2 & \longrightarrow \text{1 decimal places} \\ \hline 1450 & \text{3 decimal places} \\ 725\times & \\ \hline 8.700 & \end{array}$$

Note: Zeros on the extreme right of decimal places can be dropped.

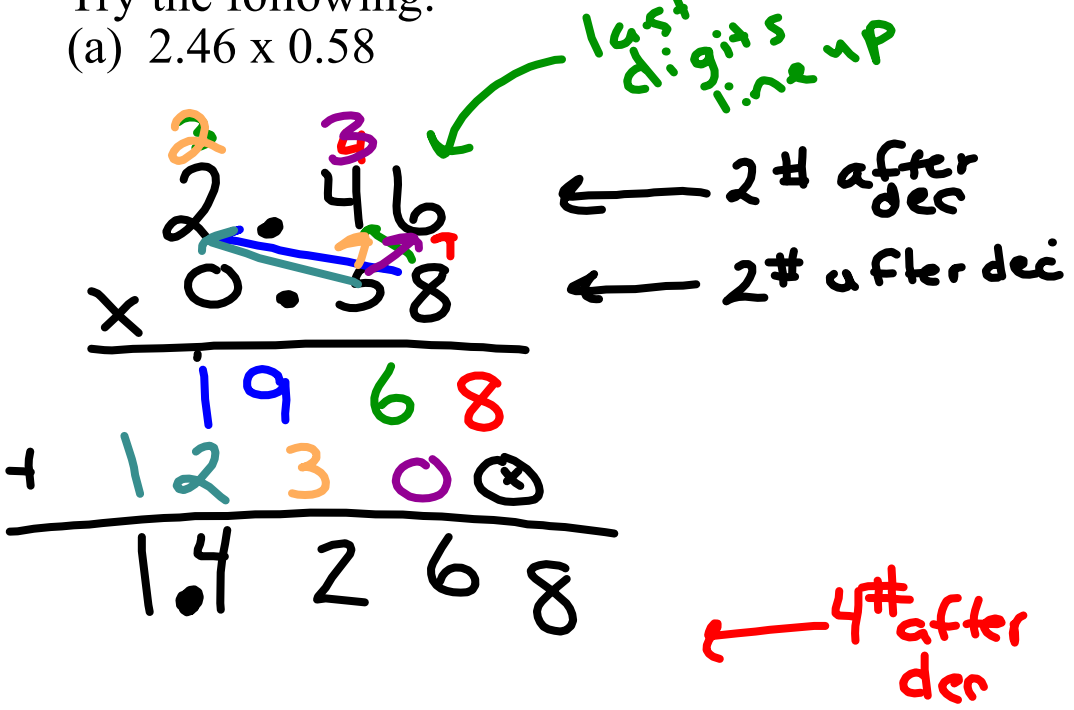
$\Rightarrow 8.7$

39 x 168

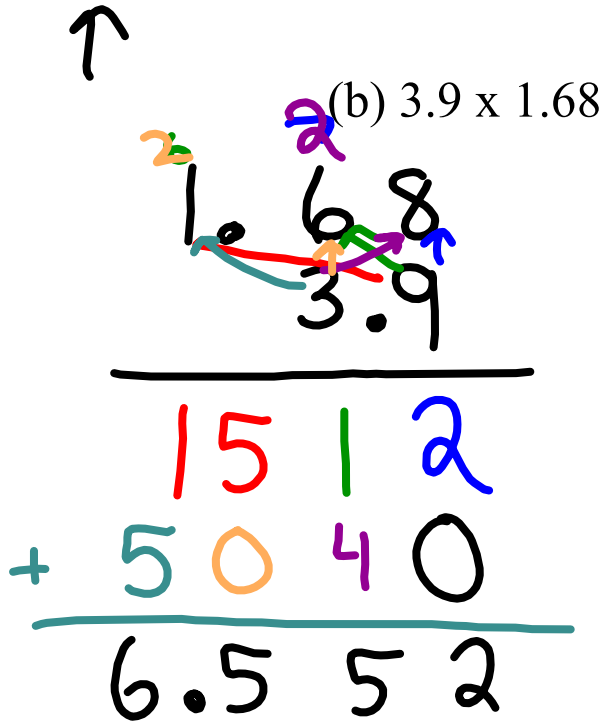
169
39

Try the following:

(a) 2.46 x 0.58



(b) 3.9 x 1.68



7.26 x 1.6

1 3

7.2 6

x 1.6

4356

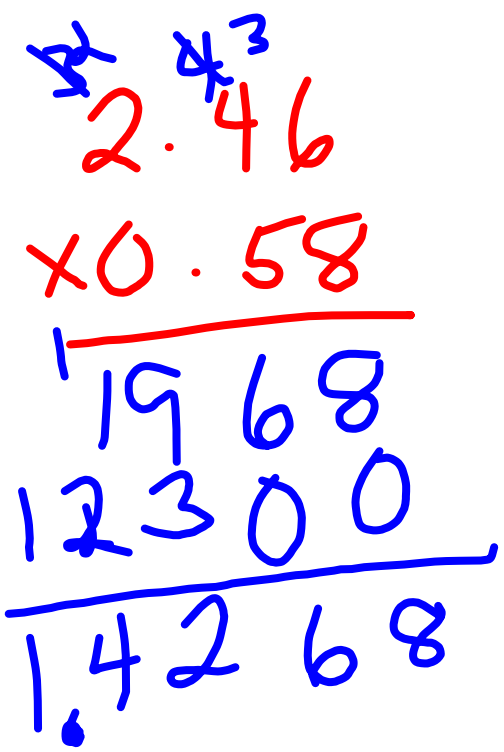
+ 726 (x)

11.616

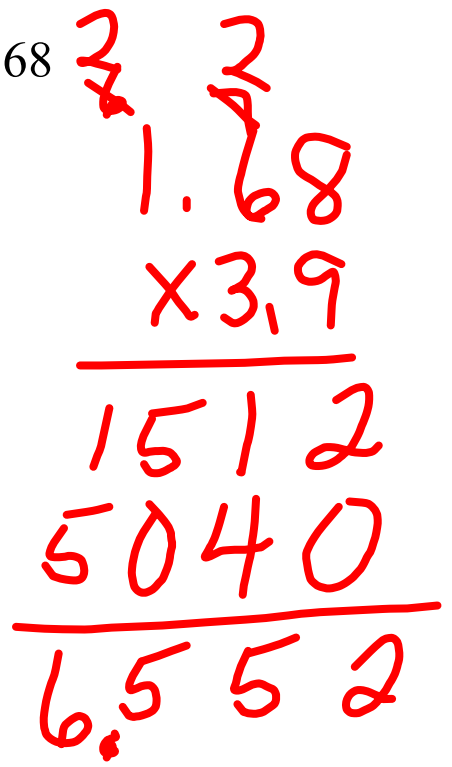
You multiply decimals the same way you multiply whole, but you have to remember to put the decimal in the proper position in your answer.

Try the following:

(a) 2.46 x 0.58



(b) 3.9 x 1.68



a) 121 X 0.7

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    121     ← none
X   0.7     ← 1# after
   84.7     ← 1# after
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b) 18.7 x 6.25

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    5 4
     187
  x 6.25
     935
    3740
+  112200
  116.875
```

Multiplying decimals WS

Not all for Homework. We will work on this again tomorrow

4. Multiply.

a) 4.2×3.7 b) 8.9×0.3 c) 0.6×0.9

5. A rectangular plot of land measures 30.5 m by 5.3 m.
What is the area of the plot?
Estimate to check your answer is reasonable.

7. **Assessment Focus** An area rug is rectangular.
Its dimensions are 3.4 m by 2.7 m.
Show different strategies you can use
to find the area of the rug.
Which strategy is best? Justify your answer.

9. The fuel consumption estimates of Josie's car are:
City: 21.2 km/L Highway: 23.3 km/L
The car's gas tank holds 40.2 L of fuel.

a) How far could Josie drive on a full tank of gas on the highway before she runs out of fuel?

b) How far could she drive on a full tank of gas in the city?

What assumptions did you make?

10. Find the cost of each item at the Farmers' Market.
Which strategy will you use? Justify your choice.

a) 4kg of apples at $0.95/kg

b) 3.2 kg of potatoes at $1.19/kg

c) 2.5 kg of herbs at $2.48/kg

12. a) Multiply 18×12.

b) Use only the result from part a and estimation.
Find each product.

i) 1.8×12 ii) 18×0.12 iii) 0.18×12 iv) 0.18×0.12