



Warm Up Grade 8

Sept. 15

1) John earns 2.56 million in his first year of work. His second year he earns 0.6 million, third year 1.025 million and 4th year 3 million.

a) How much does John make in total in his first 4 years?

b) What is the difference from his highest paying year to his lowest paying year?

$$\begin{array}{r} \text{a)} \quad 2.560 \\ \quad 0.600 \\ \quad 1.025 \\ + \quad 3.000 \\ \hline 7.185 \end{array}$$

John's Total earning was 7.185 million.

$$\begin{array}{r} \text{b)} \quad \overset{2}{\cancel{3}.10} \\ \quad - 0.6 \\ \hline 2.4 \end{array}$$

From his highest paying year to his lowest paying year there was a difference of 2.4 million.

Extra Practice 3 Solutions

$$\begin{array}{r} 1) a) \quad 9.043 \\ \quad 0.900 \\ + 1.150 \\ \hline 11.093 \end{array}$$

$$\begin{array}{r} 1b) \quad 2.09 \\ \quad 4.60 \\ + 1.80 \\ \hline 8.49 \end{array}$$

$$\begin{array}{r} 1c) \quad 9.6 \\ - 7.4 \\ \hline 2.2 \end{array}$$

$$\begin{array}{r} 1d) \quad \cancel{450.34}^0 \\ - 5.04 \\ \hline 45.36 \end{array}$$

$$\begin{array}{r} 2) a) \quad 7.56 \\ \quad 0.07 \\ + 122.70 \\ \hline 130.33 \end{array}$$

$$\begin{array}{r} 2b) \quad \cancel{67.85}^1 \\ - 6.93 \\ \hline 0.92 \end{array}$$

$$\begin{array}{r} 2c) \quad \cancel{12.12}^0 \\ - 1.68 \\ \hline 0.52 \end{array}$$

$$\begin{array}{r} 2 \\ - 2 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 2d) \quad 83.07 \\ \quad 0.42 \\ + 7.70 \\ \hline 91.19 \end{array}$$

$$\begin{array}{r} 83 \\ 0 \\ + 8 \\ \hline 91 \end{array}$$

$$\begin{array}{r}
 3) \quad \overset{1}{3}.60 \\
 \quad 1.70 \\
 \quad 3.00 \\
 + 2.28 \\
 \hline
 10.58
 \end{array}$$

Total mass AHea had to carry was 10.58kg

$$\begin{array}{r}
 4) \quad 189.4 \\
 - 156.7 \\
 \hline
 32.7
 \end{array}$$

The scenic Route is 32.7 km longer.

$$\begin{array}{r}
 5) \quad \text{Edmonton } \$1.147 \\
 \quad \text{Victoria } 1.234
 \end{array}$$

$$\begin{array}{r}
 \quad 1.234 \\
 - 1.147 \\
 \hline
 0.087 \\
 \approx 0.09
 \end{array}$$

$$\begin{array}{r}
 \quad 1.23 \\
 - 1.15 \\
 \hline
 0.08
 \end{array}$$

← nearest cent

6) Many Answers

$$\begin{array}{r}
 254.791 \\
 - 10.600 \\
 \hline
 244.191
 \end{array}$$

$$\text{So } \begin{array}{r}
 244.191 \\
 + 10.600 \\
 \hline
 254.791
 \end{array}$$

$$\begin{array}{r}
 7h) \quad 2.350 \\
 + 4.256 \\
 \hline
 6.606
 \end{array}$$

~~4.56~~
~~+ 2.35~~

a) They did not line up the decimal places

Review of Multiplication of whole numbers

To multiply a 2-digit number by a 1-digit number, follow these :

1. Write the LONGER number as the top number and the SHORTER number as the bottom number
2. MUST line up the LAST NUMBERS.
3. Multiply the bottom number (1-digit) by each digit of the top number (2-digit) one at a time, starting from the rightmost (ones place) digit.
4. After multiplying by each digit of the top number, add all the partial products.

a) 72×6

$$\begin{array}{r} 72 \\ \times 6 \\ \hline 432 \end{array}$$

b) 308×7

$$\begin{array}{r} 308 \\ \times 7 \\ \hline 2156 \end{array}$$

c) 4×453

$$\begin{array}{r} 453 \\ \times 4 \\ \hline 1812 \end{array}$$

Review of Multiplication of whole numbers

To multiply a 2-digit number by a 2-digit number, follow these :

1. Write the LONGER number as the top number and the SHORTER number as the bottom number
2. MUST line up the LAST NUMBERS.
3. Multiply the bottom number (LAST-digit) by each digit of the top number (2-digit) one at a time, starting from the rightmost (ones place) digit.
4. NOW need to put a place holder '0' on second row in the rightmost position, since we are going to multiply by the 'tens' place of the second row.
5. Multiply the bottom number (first-digit of bottom #) by each digit of the top number (2-digit) one at a time, starting from the rightmost (ones place) digit.
6. After multiplying by each digit of the top number, add all the partial products.

a) 14×17

$$\begin{array}{r} 14 \\ \times 17 \\ \hline 98 \\ + 140 \\ \hline 238 \end{array}$$

b) 24×31

$$\begin{array}{r} 24 \\ \times 31 \\ \hline 24 \\ + 720 \\ \hline 744 \end{array}$$

c) 18×24

$$\begin{array}{r} 18 \\ \times 24 \\ \hline 72 \\ + 360 \\ \hline 432 \end{array}$$

2-Digit by 1-Digit Multiplication (A)

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

	5	3
	×	9
<hr/>		

	9	3
	×	3
<hr/>		

	8	9
	×	5
<hr/>		

	7	3
	×	7
<hr/>		

	9	0
	×	4
<hr/>		

	3	7
	×	5
<hr/>		

	5	9
	×	8
<hr/>		

	3	6
	×	8
<hr/>		

	9	2
	×	7
<hr/>		

	9	7
	×	7
<hr/>		

	1	5
	×	6
<hr/>		

	9	7
	×	9
<hr/>		

	2	4
	×	7
<hr/>		

	2	1
	×	2
<hr/>		

	1	6
	×	3
<hr/>		

	4	6
	×	7
<hr/>		

	2	1
	×	3
<hr/>		

	9	5
	×	6
<hr/>		

	2	2
	×	8
<hr/>		

	6	6
	×	3
<hr/>		

	4	0
	×	3
<hr/>		

	4	3
	×	3
<hr/>		

	3	4
	×	6
<hr/>		

	5	9
	×	3
<hr/>		

	5	9
	×	9
<hr/>		

	4	8
	×	7
<hr/>		

	8	7
	×	5
<hr/>		

	6	1
	×	3
<hr/>		

	1	5
	×	4
<hr/>		

	1	7
	×	5
<hr/>		

Name: _____

2-Digit by 2-Digit Multiplication (A)
Use the grid to help you multiply each pair of factors.

		8	2
	×	4	1
<hr/>			

		4	4
	×	4	2
<hr/>			

		2	5
	×	1	0
<hr/>			

		9	3
	×	8	6
<hr/>			

		7	2
	×	8	7
<hr/>			

		4	3
	×	1	0
<hr/>			

		6	2
	×	5	2
<hr/>			

		5	6
	×	9	6
<hr/>			

		9	1
	×	4	7
<hr/>			

		9	4
	×	8	3
<hr/>			

		7	5
	×	1	3
<hr/>			

		3	4
	×	9	8
<hr/>			

		2	3
	×	4	8
<hr/>			

		4	4
	×	6	2
<hr/>			

		7	9
	×	9	7
<hr/>			

		9	9
	×	6	5
<hr/>			

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
	x	4	1
		8	2
+	3	2	8
	3	3	6

		4	4
	x	4	2
		8	8
+	1	7	6
	1	8	4

		2	5
	x	1	0
		0	0
+	2	5	0
	2	5	0

		9	3
	x	8	6
		5	5
+	7	4	4
	7	9	9

		7	2
	x	8	7
		5	0
+	5	7	6
	6	2	6

		4	3
	x	1	0
		0	0
+	4	3	0
	4	3	0

		6	2
	x	5	2
		1	2
+	3	1	0
	3	2	2

		5	6
	x	9	6
		3	3
+	5	0	4
	5	3	7

		9	1
	x	4	7
		6	3
+	3	6	4
	4	2	7

		9	4
	x	8	3
		2	8
+	7	5	2
	7	8	0

		7	5
	x	1	3
		2	2
+	7	5	0
	9	7	5

		3	4
	x	9	8
		2	7
+	3	0	6
	3	3	3

		2	3
	x	4	8
		1	8
+	9	2	0
	1	1	0

		2	4
	x	6	2
		8	8
+	2	6	4
	2	7	2

		7	9
	x	9	7
		5	5
+	7	1	1
	7	6	6

		9	9
	x	6	5
		4	9
+	5	9	4
	6	4	3

Name: _____

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2-Digit by 2-Digit Multiplication (A)

Name: _____

Date: _____

Score: _____ /20

Calculate each product.

14

× 83

24

× 83

92

× 32

60

× 21

93

× 65

49

× 55

25

× 65

13

× 34

82

× 60

13

× 18

25

× 67

28

× 53

77

× 11

35

× 61

96

× 17

37

× 76

52

× 80

15

× 51

24

× 11

57

× 57

Name: _____

WS Gr 8 u2 Int/ord day 6 mult review

3-Digit by 2-Digit Multiplication (A)				
Name: _____	Date: _____	Score: ____ /20		
Calculate each product.				
$\begin{array}{r} 435 \\ \times 72 \\ \hline \end{array}$	$\begin{array}{r} 325 \\ \times 54 \\ \hline \end{array}$	$\begin{array}{r} 804 \\ \times 79 \\ \hline \end{array}$	$\begin{array}{r} 908 \\ \times 47 \\ \hline \end{array}$	$\begin{array}{r} 905 \\ \times 80 \\ \hline \end{array}$
_____	_____	_____	_____	_____
$\begin{array}{r} 394 \\ \times 71 \\ \hline \end{array}$	$\begin{array}{r} 977 \\ \times 45 \\ \hline \end{array}$	$\begin{array}{r} 256 \\ \times 32 \\ \hline \end{array}$	$\begin{array}{r} 989 \\ \times 55 \\ \hline \end{array}$	$\begin{array}{r} 284 \\ \times 81 \\ \hline \end{array}$
_____	_____	_____	_____	_____
$\begin{array}{r} 183 \\ \times 38 \\ \hline \end{array}$	$\begin{array}{r} 592 \\ \times 78 \\ \hline \end{array}$	$\begin{array}{r} 501 \\ \times 36 \\ \hline \end{array}$	$\begin{array}{r} 428 \\ \times 57 \\ \hline \end{array}$	$\begin{array}{r} 640 \\ \times 54 \\ \hline \end{array}$
_____	_____	_____	_____	_____
$\begin{array}{r} 788 \\ \times 49 \\ \hline \end{array}$	$\begin{array}{r} 205 \\ \times 15 \\ \hline \end{array}$	$\begin{array}{r} 422 \\ \times 97 \\ \hline \end{array}$	$\begin{array}{r} 169 \\ \times 48 \\ \hline \end{array}$	$\begin{array}{r} 891 \\ \times 87 \\ \hline \end{array}$
_____	_____	_____	_____	_____

2-Digit by 2-Digit Multiplication (A)

Name: Key

Date: _____

Score: _____ /20

Calculate each product.

$$\begin{array}{r} 14 \\ \times 83 \\ \hline 42 \\ 1120 \\ \hline 1162 \end{array}$$

$$\begin{array}{r} 93 \\ \times 65 \\ \hline 465 \\ 5580 \\ \hline 6045 \end{array}$$

$$\begin{array}{r} 82 \\ \times 60 \\ \hline 00 \\ 4920 \\ \hline 4920 \end{array}$$

$$\begin{array}{r} 77 \\ \times 11 \\ \hline 77 \\ 770 \\ \hline 847 \end{array}$$

$$\begin{array}{r} 52 \\ \times 80 \\ \hline 00 \\ 4160 \\ \hline 4160 \end{array}$$

$$\begin{array}{r} 24 \\ \times 83 \\ \hline 72 \\ 1920 \\ \hline 1992 \end{array}$$

$$\begin{array}{r} 49 \\ \times 55 \\ \hline 245 \\ 2450 \\ \hline 2695 \end{array}$$

$$\begin{array}{r} 13 \\ \times 18 \\ \hline 104 \\ 130 \\ \hline 234 \end{array}$$

$$\begin{array}{r} 35 \\ \times 61 \\ \hline 35 \\ 2100 \\ \hline 2135 \end{array}$$

$$\begin{array}{r} 15 \\ \times 51 \\ \hline 15 \\ 750 \\ \hline 765 \end{array}$$

$$\begin{array}{r} 92 \\ \times 32 \\ \hline 184 \\ 2760 \\ \hline 2944 \end{array}$$

$$\begin{array}{r} 25 \\ \times 65 \\ \hline 125 \\ 1500 \\ \hline 1625 \end{array}$$

$$\begin{array}{r} 25 \\ \times 67 \\ \hline 175 \\ 1500 \\ \hline 1675 \end{array}$$

$$\begin{array}{r} 96 \\ \times 17 \\ \hline 672 \\ 960 \\ \hline 1632 \end{array}$$

$$\begin{array}{r} 24 \\ \times 11 \\ \hline 24 \\ 240 \\ \hline 264 \end{array}$$

$$\begin{array}{r} 60 \\ \times 21 \\ \hline 60 \\ 1200 \\ \hline 1260 \end{array}$$

$$\begin{array}{r} 13 \\ \times 34 \\ \hline 52 \\ 390 \\ \hline 442 \end{array}$$

$$\begin{array}{r} 28 \\ \times 53 \\ \hline 84 \\ 1400 \\ \hline 1484 \end{array}$$

$$\begin{array}{r} 37 \\ \times 76 \\ \hline 222 \\ 2590 \\ \hline 2812 \end{array}$$

$$\begin{array}{r} 57 \\ \times 57 \\ \hline 399 \\ 2850 \\ \hline 3249 \end{array}$$

3-Digit by 2-Digit Multiplication (A)

Name: _____

Date: _____

Score: _____ /20

Key

Calculate each product.

$$\begin{array}{r} \overset{2}{4}\overset{3}{35} \\ \times 72 \\ \hline 870 \\ 30450 \\ \hline 31320 \end{array}$$

$$\begin{array}{r} \overset{1}{3}\overset{2}{25} \\ \times 54 \\ \hline 1300 \\ 16250 \\ \hline 17550 \end{array}$$

$$\begin{array}{r} \overset{3}{804} \\ \times 79 \\ \hline 7236 \\ 56280 \\ \hline 63516 \end{array}$$

$$\begin{array}{r} \overset{3}{908} \\ \times 47 \\ \hline 6356 \\ 36320 \\ \hline 42676 \end{array}$$

$$\begin{array}{r} \overset{4}{905} \\ \times 80 \\ \hline 000 \\ 72400 \\ \hline 72400 \end{array}$$

$$\begin{array}{r} \overset{6}{3}\overset{2}{94} \\ \times 71 \\ \hline 394 \\ 27580 \\ \hline 27974 \end{array}$$

$$\begin{array}{r} \overset{3}{9}\overset{3}{77} \\ \times 45 \\ \hline 4885 \\ 39080 \\ \hline 43965 \end{array}$$

$$\begin{array}{r} \overset{1}{2}\overset{11}{256} \\ \times 32 \\ \hline 512 \\ 7680 \\ \hline 8192 \end{array}$$

$$\begin{array}{r} \overset{4}{9}\overset{4}{89} \\ \times 55 \\ \hline 4945 \\ 49450 \\ \hline 54395 \end{array}$$

$$\begin{array}{r} \overset{6}{2}\overset{3}{84} \\ \times 81 \\ \hline 284 \\ 22720 \\ \hline 23004 \end{array}$$

$$\begin{array}{r} \overset{2}{1}\overset{3}{83} \\ \times 38 \\ \hline 1464 \\ 5490 \\ \hline 6954 \end{array}$$

$$\begin{array}{r} \overset{6}{5}\overset{1}{92} \\ \times 78 \\ \hline 4736 \\ 41440 \\ \hline 46176 \end{array}$$

$$\begin{array}{r} 501 \\ \times 36 \\ \hline 3006 \\ 15030 \\ \hline 18036 \end{array}$$

$$\begin{array}{r} \overset{1}{4}\overset{5}{428} \\ \times 57 \\ \hline 2996 \\ 21400 \\ \hline 24396 \end{array}$$

$$\begin{array}{r} \overset{2}{6}\overset{4}{40} \\ \times 54 \\ \hline 2560 \\ 32000 \\ \hline 34560 \end{array}$$

$$\begin{array}{r} \overset{3}{7}\overset{3}{88} \\ \times 49 \\ \hline 7092 \\ 31520 \\ \hline 38612 \end{array}$$

$$\begin{array}{r} \overset{2}{205} \\ \times 15 \\ \hline 1025 \\ 2050 \\ \hline 3075 \end{array}$$

$$\begin{array}{r} \overset{1}{4}\overset{1}{22} \\ \times 97 \\ \hline 2954 \\ 37980 \\ \hline 40934 \end{array}$$

$$\begin{array}{r} \overset{2}{1}\overset{3}{69} \\ \times 48 \\ \hline 1352 \\ 6760 \\ \hline 8112 \end{array}$$

$$\begin{array}{r} \overset{7}{8}\overset{9}{91} \\ \times 87 \\ \hline 6237 \\ 71280 \\ \hline 77517 \end{array}$$