



Name: _____

Grade 6

NUMBER SENSE & NUMERATION: MULTIPLICATION OF DECIMALS

Don't forget to play **Decimultiplication** first! Go to mathfrog.ca for the link.

1. Perform the following multiplications.

a)
$$\begin{array}{r} 1.3 \\ \times 2 \\ \hline \end{array}$$

b)
$$\begin{array}{r} 2.1 \\ \times 4 \\ \hline \end{array}$$

c)
$$\begin{array}{r} 3.3 \\ \times 2 \\ \hline \end{array}$$

d)
$$\begin{array}{r} 3.1 \\ \times 3 \\ \hline \end{array}$$

e)
$$\begin{array}{r} 2.4 \\ \times 3 \\ \hline \end{array}$$

f)
$$\begin{array}{r} 4.2 \\ \times 2 \\ \hline \end{array}$$

g)
$$\begin{array}{r} 2.8 \\ \times 5 \\ \hline \end{array}$$

h)
$$\begin{array}{r} 7.0 \\ \times 5 \\ \hline \end{array}$$

i)
$$\begin{array}{r} 3.5 \\ \times 4 \\ \hline \end{array}$$

j)
$$\begin{array}{r} 4.3 \\ \times 4 \\ \hline \end{array}$$

k)
$$\begin{array}{r} 5.6 \\ \times 2 \\ \hline \end{array}$$

l)
$$\begin{array}{r} 3.9 \\ \times 5 \\ \hline \end{array}$$

m)
$$\begin{array}{r} 5.7 \\ \times 4 \\ \hline \end{array}$$

n)
$$\begin{array}{r} 7.8 \\ \times 3 \\ \hline \end{array}$$

o)
$$\begin{array}{r} 6.2 \\ \times 9 \\ \hline \end{array}$$

p)
$$\begin{array}{r} 9.3 \\ \times 7 \\ \hline \end{array}$$

q)
$$\begin{array}{r} 6.0 \\ \times 6 \\ \hline \end{array}$$

r)
$$\begin{array}{r} 8.8 \\ \times 6 \\ \hline \end{array}$$

s)
$$\begin{array}{r} 6.9 \\ \times 8 \\ \hline \end{array}$$

t)
$$\begin{array}{r} 5.0 \\ \times 9 \\ \hline \end{array}$$

u)
$$\begin{array}{r} 7.6 \\ \times 4 \\ \hline \end{array}$$

v)
$$\begin{array}{r} 3.7 \\ \times 6 \\ \hline \end{array}$$

w)
$$\begin{array}{r} 4.9 \\ \times 9 \\ \hline \end{array}$$

x)
$$\begin{array}{r} 8.5 \\ \times 9 \\ \hline \end{array}$$

y)
$$\begin{array}{r} 3.9 \\ \times 8 \\ \hline \end{array}$$

z)
$$\begin{array}{r} 8.8 \\ \times 7 \\ \hline \end{array}$$

A)
$$\begin{array}{r} 5.4 \\ \times 5 \\ \hline \end{array}$$

B)
$$\begin{array}{r} 9.7 \\ \times 4 \\ \hline \end{array}$$

C)
$$\begin{array}{r} 7.0 \\ \times 8 \\ \hline \end{array}$$

D)
$$\begin{array}{r} 6.4 \\ \times 7 \\ \hline \end{array}$$

2. Print the missing number in each box.

a)
$$\begin{array}{r} 2.3 \\ \times \square \\ \hline 6.9 \end{array}$$

b)
$$\begin{array}{r} 4.\square \\ \times 2 \\ \hline 8.6 \end{array}$$

c)
$$\begin{array}{r} \square.2 \\ \times 4 \\ \hline 4.\square \end{array}$$

d)
$$\begin{array}{r} 2.6 \\ \times \square \\ \hline 7.8 \end{array}$$

e)
$$\begin{array}{r} 3.3 \\ \times \square \\ \hline \square.9 \end{array}$$

f)
$$\begin{array}{r} 1.\square \\ \times 4 \\ \hline 6.4 \end{array}$$

g)
$$\begin{array}{r} \square.6 \\ \times 3 \\ \hline 7.8 \end{array}$$

h)
$$\begin{array}{r} 4.9 \\ \times \square \\ \hline 19.6 \end{array}$$

i)
$$\begin{array}{r} 5.\square \\ \times 3 \\ \hline 17.1 \end{array}$$

j)
$$\begin{array}{r} \square.8 \\ \times 6 \\ \hline 16.8 \end{array}$$

k)
$$\begin{array}{r} 3.\square \\ \times 6 \\ \hline 1\square.8 \end{array}$$

l)
$$\begin{array}{r} 6.0 \\ \times \square \\ \hline 18.\square \end{array}$$

m)
$$\begin{array}{r} 5.\square \\ \times 5 \\ \hline 29.5 \end{array}$$

n)
$$\begin{array}{r} \square.4 \\ \times 6 \\ \hline 38.4 \end{array}$$

o)
$$\begin{array}{r} 8.3 \\ \times \square \\ \hline 74.7 \end{array}$$

p)
$$\begin{array}{r} \square.9 \\ \times 7 \\ \hline 3\square.3 \end{array}$$

q)
$$\begin{array}{r} \square.5 \\ \times 8 \\ \hline 60.0 \end{array}$$

r)
$$\begin{array}{r} 8.7 \\ \times \square \\ \hline 5\square.2 \end{array}$$

s)
$$\begin{array}{r} \square.\square \\ \times 3 \\ \hline 13.8 \end{array}$$

t)
$$\begin{array}{r} 3.8 \\ \times \square \\ \hline \square\square.8 \end{array}$$

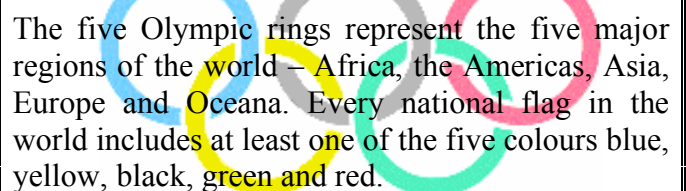
u)
$$\begin{array}{r} 5.\square \\ \times \square \\ \hline 37.1 \end{array}$$

v)
$$\begin{array}{r} \square.8 \\ \times 5 \\ \hline 49.0 \end{array}$$

w)
$$\begin{array}{r} \square.7 \\ \times 6 \\ \hline 40.\square \end{array}$$

x)
$$\begin{array}{r} \square.\square \\ \times 6 \\ \hline 50.4 \end{array}$$

Did You Know ?



The five Olympic rings represent the five major regions of the world – Africa, the Americas, Asia, Europe and Oceania. Every national flag in the world includes at least one of the five colours blue, yellow, black, green and red.

Expectations: i) multiply decimal numbers to tenths by whole numbers. ii) multiply whole numbers by 0.1, 0.01, and 0.001 using mental strategies. iii) multiply decimal numbers by 10, 100, 1000 and 10 000 using mental strategies.

3. Correctly complete each blank.

- | | | |
|-------------------------------|------------------------------|---------------------------------|
| a) $0.39 \times 10 =$ _____ | f) $56 \times 0.1 =$ _____ | k) $32 \times 0.001 =$ _____ |
| b) $10 \times 52.84 =$ _____ | g) $0.1 \times 495 =$ _____ | l) $1000 \times 392.7 =$ _____ |
| c) $6.37 \times 100 =$ _____ | h) $380 \times 0.1 =$ _____ | m) $681 \times 0.001 =$ _____ |
| d) $100 \times 0.2 =$ _____ | i) $69 \times 0.01 =$ _____ | n) $3.59 \times 10000 =$ _____ |
| e) $0.52 \times 1000 =$ _____ | j) $0.01 \times 765 =$ _____ | o) $0.001 \times 26.31 =$ _____ |

4. Sandy bought six packs of Smarties. Each pack cost \$1.20. If she paid with a ten-dollar bill, how much change should Sandy receive?
5. Milan purchased seven dozen apples at \$1.69 per dozen. He sold them at four apples for \$0.95. What was his total profit?

6. Jim Hortons serves two kinds of coffee. Regular coffee costs \$0.42 per 100g and decaf coffee costs \$0.51 per 100g. Which will cost more - 800g of regular or 600g of decaf coffee? What will be the difference between the two total costs?



7. Use the data in the table to complete the following sentences.

MENU ITEM (one serving)	ENERGY (calories)	PROTEIN (grams)	CARBOHYDRATE (grams)	FAT (grams)	SALT (grams)	FIBRE (grams)
Apple Pie	219	2.4	21.4	13.8	0.2	4.3
Buttered Muffin	163	5.7	25.9	3.6	0.3	1.5
Plain Donut	282	4.2	29.7	16.3	0.4	1.8
Regular French Fries	259	3.2	30.5	13.8	0.1	4.1
Garden Salad	111	8.9	1.0	6.2	0.2	7.5

- a) Ten servings of regular French fries contain _____ calories of energy.
- b) If you eat 100 servings of apple pie, you will gain _____ grams of fat.
- c) Five buttered muffins and eight plain donuts contain _____ grams of protein.
- c) 1000 garden salads contain _____ kilograms of salt.
- d) _____ buttered muffins contain approximately 2.6 kilograms of carbohydrates.

TRY THESE!

- a) If six times an unknown decimal is increased by 3.7, the result is 34.9. What is the unknown decimal?
- b) Seven times an unknown decimal is equal to the sum of 5.8 and five times the unknown decimal. What is the unknown decimal?

