

**MINISTRY OF EDUCATION**  
**SECONDARY ENGAGEMENT PROGRAMME**  
**CHRISTMAS TERM 2020/2021**

**GRADE 9**

**SUBJECT: MATHEMATICS**

**WEEK 4**

**Lesson #1**

**Topic:** Computation

**Sub-Topic:** Computing decimals

**Objectives:**

Students will:

- ✓ Understand the concept of decimals;
- ✓ Add, subtract, multiply and divide decimals.

**Content:**

**Decimals**

**Operations with Decimals**

**Adding and Subtracting Decimals**

Adding and subtracting decimals is easy if you're comfortable with carrying and borrowing. Just line up the decimal points, and (if necessary) add zeros to the end of one number, so they have the same number of decimal places. Then add (or subtract) as you usually would.

In your answer, the decimal point should go exactly below where it is in the numbers being added (or subtracted).



Example:

# Multiplying Decimal Numbers

Multiplying Decimal Numbers is very easy and simple. Just follow these three simple steps.....

**Step 1:** Rewrite decimal numbers without decimal points.

**Step 2:** Multiply normally as we multiply the regular whole numbers.

**Step 3:** Count the number of decimal places for both numbers.

In other words, count how many digits are after the decimal point in both the numbers you are multiplying. Then add those number of decimal points to the answer.

Now, lets **Multiply**  $1.2 \times 0.3 = ?$

**Step 1:**

$$\begin{array}{r} 12 \\ \times 03 \\ \hline 36 \end{array}$$

**Step 2:**  $1.2$  has 1 decimal places.  
and  $0.3$  has 1 decimal places.

So, answer will have 2 decimal places

$$1.2 \times 0.3 = 0.36$$

Now lets **Multiply**  $0.25 \times 0.3 = ?$

**Step 1:**

$$\begin{array}{r} 25 \\ \times 3 \\ \hline 75 \end{array}$$

**Step 2:**  $0.25$  has 2 decimal places.  
and  $0.3$  has 1 decimal places.

So, answer will have 3 decimal places.

The product 75 has only 2 digits. There aren't enough digits in 75 to place decimal point. Hence, we add Zero to the left of the product to place decimal point.

$$0.25 \times 0.3 = 0.075$$

Exercise:

Solution

**Exercise 3g**

- Write down the value of:  
(a)  $36.34 + 2.71 + 0.041$   
(b)  $4.317 - 0.015$
- Divide 1.45 by 5
- Complete  $9.2 - 1.82$
- Multiply 3.2 by 1.5
- Determine the sum of 9.2, 5.6 and 1.3
- Add 0.58 to 3.5
- Evaluate  $9.5 + 0.86 + 3.7$
- Take 18.3 from 75.6
- Evaluate  $8.62 - 0.51$
- Subtract 1.8 from 10.3
- Determine the value of:  
(a)  $56.8 \div 0.4$  (b)  $0.2556 \div 15$
- Share 15.3 kg equally between two people.
- Divide 97.8 into 8 equal parts.
- Determine the value of each of the following expressions:  
(a)  $27.418 + 0.967 + 25 + 1.467$   
(b)  $5.48 - 0.0691$
- Calculate the exact value of:  
(a)  $3.45 \times 4.3$  (b)  $6.2 \div 1.24$
- Evaluate the exact value of:  
(a)  $2.35 \times 6.7$  (b)  $6.9 \div 1.15$
- Determine the exact value of:  
(a)  $8.05 + 5.23 - 6.38$  (b)  $8.21 \times 0.05$
- Find the exact value of  $6.04 \times 3.4$

**Exercise 3g**

- (a) 39.091 (b) 4.302
- 0.29 3. 7.38
- 4.8 5. 16.1
- 4.08 7. 14.06
- 57.3 9. 8.11 10. 8.5
- (a) 142 (b) 0.01704
- 7.65 kg 13. 12.225
- (a) 54.852 (b) 5.4109
- (a) 14.835 (b) 5
- (a) 15.745 (b) 6
- (a) 6.9 (b) 0.4105
- 20.536 19. 20.74

Reference:

Raymond Toolsie, (1996). Mathematics A Complete Course with CXC Questions Volume 1 pages 44 – 45.

[www.varsitytutors.com/hotmath/hotmath\\_help/topics/operations-with-decimals](http://www.varsitytutors.com/hotmath/hotmath_help/topics/operations-with-decimals)