# Mathematics Essential

# Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## Task 1.4 – Unit 1

**Assessment type:** Response - Skills

**Conditions:**

Time for the task: 15 minutes

In class, calculator permitted

**Marks:** 16 marks \_\_\_\_\_\_\_\_\_\_/16

**Task weighting:**

2% of the school mark for this unit

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Give the .answer to :

a) 17 + (3 + 8)2

b) 5 x 8 – 3 x 7

1. a) Write 2.05 as a percentage

b) Write 56% as a decimal

c) Increase $175 by 10% (GST)

d) Increase 0.7m by 40%

3. If carrots cost $2.76 per Kilogram

a) 5kg = $\_\_\_\_\_\_\_\_\_\_\_\_\_\_?

b)How many kgs for $18 = \_\_\_\_\_\_\_\_kg

4. a) 0.25cm2 = \_\_\_\_\_\_\_\_\_\_\_\_mm2?

b) 15.35ha = \_\_\_\_\_\_\_\_\_\_\_\_\_\_m2

c) 2.6cm2 = \_\_\_\_\_\_\_\_\_\_\_\_mm2?

d) 1.23m3 = \_\_\_\_\_\_\_\_\_\_\_cm3?

5. If I can fast walk at 12km/hr?

a) How long would it take to walk 5 km?

b) How far would I go in 2 minutes?

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ m

6. a) What is the volume of a rectangular box 15m by 4m by 7m? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) What is the volume of a rectangular box 1.5m by 85cm by 76cm?

# Mathematics Essential **Solutions**

## Task 1.4 – Unit 1

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**Task weighting:**

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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Give the .answer to :

a) 17 + (3 + 8)2

= 138 ✓

b) 5 x 8 – 3 x 7

= 19 ✓

1. a) Write 2.005 as a percentage

= 205% ✓

b) Write 56% as a decimal

= 0.56 ✓

c) Increase $175 by 10% (GST)

= $175 + $17.50 = $192.50 ✓

d) Increase 0.7 by 40%

= 0.7 + 0.4 x 0.7 = 0.98m ✓

3. If carrots cost $2.76 per Kilogram

a) 5kg = $13.80 ✓\_\_\_?

b)How many kgs for $18 = \_\_\_6.52 ✓kg

4. a) 0.25cm2 = \_\_\_25 ✓\_\_\_mm2?

b) 15.35ha = \_\_\_153 500 ✓\_\_\_m2

c) 2.6cm2 = \_\_\_260 ✓\_\_\_mm2?

d) 1.23m3 = \_1 230 000 ✓\_\_cm3?

5. If I can fast walk at 12km/hr?

a) How long would it take to walk 5 km?

= 25 ✓ minutes

b) How far would I go in 2 minutes?

\_\_\_= 400 ✓ \_\_\_\_\_ m

6. a) What is the volume of a rectangular box 15m by 4m by 7m? \_\_420 m3 ✓\_\_\_\_\_\_\_

b) What is the volume of a rectangular box 1.5m by 85cm by 76cm? = 0.969 m3 or 969 000cm3 ✓