# Mathematics Essential

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

## Task 2.7 – Unit 2

**Assessment type:** Response - Skills

**Conditions:**

Time for the task: 30 minutes

In class, calculator permitted

**Marks:**  marks \_\_\_\_\_\_/ 28

**Task weighting:**

2% of the school mark for this unit

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

**Question 1:**

**Find the equivalent units of measure. (16Marks)**

|  |  |
| --- | --- |
| 1. 370mm = m | 9. 375 mL = L |
| 1. 1.3t = kg | 10. 3 600 J = kJ |
| 1. How many seconds in 3 minutes? | 11. 1 700 mL = L |
| 1. 42cm = m | 12. Find 10% of $3 800 |
| 1. How many minutes in 150 seconds? | 13. 2.25L = mL |
| 1. 250cm3 = mL | 14. 1 600mm = m |
| 1. One cubic metre = cm3 | 15. One square metre = cm2 |
| 1. Change 1.1 to a percentage | 16. 5mm = m |

**Question 2:** **(2 marks)**

An ambulance is travelling along the freeway to an accident at a speed of 120km/h. The accident is 15km from the ambulance station. How long will the ambulance take to travel from the station to the accident?

**Question 3:** **(4 Marks)**

Divide $70 into the following ratios;

1. 1:2:4
2. 2:7:1

**Question 4:** Jane is driving to Perth from Karratha 1545km away. Her Toyota Hilux uses diesel petrol at a rate of 8.3L per 100 km

1. How much fuel does Jane use to travel the 1545km trip?  **[2 marks]**
2. If her fuel tank holds 76L of fuel, how many times will she need to fill up her tank? **[2 marks]**
3. Diesel fuel price in northern WA averages at 168c/L. Based on your answer in a) calculate the total cost of petrol for the trip. **[2 marks]**