

Mathematics Essential

Name: _____

Task 2.7 – Unit 2

Assessment type: Response - Skills

Marks: marks _____ / 28

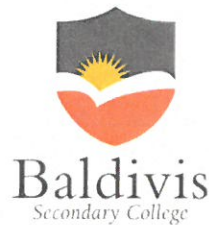
Conditions:

Time for the task: 30 minutes

In class, calculator permitted

Task weighting:

2% of the school mark for this unit



Question 1:

Find the equivalent units of measure.

(16Marks)

1. 370mm = 0.37 m	9. 375 mL = 0.375 L
2. 1.3t = 1300 kg	10. 3 600 J = 3.6 kJ
3. How many seconds in 3 minutes? 180sec	11. 1 700 mL = 1.7 L
4. 42cm = 0.42 m	12. Find 10% of \$3 800 = \$380
5. How many minutes in 150 seconds? 2.5min	13. 2.25L = 2250 mL
6. 250cm ³ = 250 mL	14. 1 600mm = 1.6 m
7. One cubic metre = 10000cm ³	15. One square metre = 10000 cm ²
8. Change 1.1 to a percentage 110%	16. 5mm = 0.05 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?

7.5mins

Question 3:**(4 Marks)**

Divide \$70 into the following ratios;

a) 1:2:4 $\div 7 = \$10$

$\$10 : \$20 : \$40$

b) 2:7:1 $\div 10 = \$7$

$\$14 : \$49 : \$7$

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

a) How much fuel does Jane use to travel the 1545km trip?

[2 marks]

$8.3L : 100km$

$128.24L : 1545km$

b) If her fuel tank holds 76L of fuel, how many times will she need to fill up her tank?

[2 marks]

$128.24L \div 76L = 1.68$

2 times

c) 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]

$168c : 1L$

$\div 128.24$

$21544.32c$

$\div 100$

$\$215.44$