Week 15 Term 4 2023





HAWKER COLLEGE

EM2 Rates and ratios Time and motion

# Goals

Goals for this week:

• Organising and calculating costs for a trip

Exam: Tuesday 14th November at 11:15 am to 1:15 pm

HAVE YOU GOT A CALCULATOR? (you cannot use your phone)

# Theoretical Components

# STEP 1

**Resources:** *PDF file:* Week 15 Notes and Exercises

### This Week:

We will be learning to:

- Plan your trip
- Flights
- Accommodation
- Transport
- Fuel
- Activities
- Budget

# **Practical** Components

## STEP 2

There is no separate practical for this week.

Remember to regularly check Google Classroom for messages.

# Portfolio Task

# STEP 3

This task is both your practical and portfolio task this week.  $\textcircled{\mbox{$\Im$}}$ 

Other

#### Your exam will be in week 16.

- You may bring your folders, calculator (not a mobile phone) and writing materials.
- Make sure your folders are complete and well-organised.

# **TRAVEL ITINERARY**

# TRIP DURATION: 5 DAYS

DAYS	1	2	3	4	5
DESTINATION	Welton Hotel (Room 2209)	The Atrium Event Centre	The Atrium Event Centre	The Axewell	The Axewell
EAT	The Garrison, Winchester Pub, Ali Khan's	Lunch & Dinner Provided	The Haluman Magic Show	Julianna's, Mario Italian, The Hot Wok	The Captain's Mark, Jackson Astor, Spring Rolls
	Jazz Festival Monero	Yak-Yak Comedy Club	Yak-Yak Comedy Club	The Networkers Marketing Event	The Networkers Marketing Event
TRANSPORTATION	Transport, Hotel Cab	Public Transport, Cab	Public Transport, Cab	Public Transport, Cab	Public Transport, Cab

# **ESSENTIAL MATHEMATICS 2**

### Week 15 Portfolio Task

#### Task:

- You deserve a holiday, and so does your friend.
- You have decided to visit the State of Queensland at the end of November.
- You will fly to Brisbane on a Friday and return on a Monday.
- While there you will use a hire car to visit attractions in Brisbane and surrounds.
- You must visit at least 1 nearby city/town, and 4 tourist attractions, including at least 1 where you experience the local aboriginal culture.
- You will require suitable accommodation for Friday, Saturday and Sunday nights.

#### You will be planning and costing an itinerary for your trip.



#### 1. Plan your trip.

a. Decide where you would like to visit and plan out your trip. Complete the table.

Day	Sites and Activities
Friday	Arrive Brisbane
Saturday	
Sunday	
Monday	
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Have you visited at least one other city/town? Have you visited at least 4 tourist attractions? Have you included at least 1 indigenous experience?

b. Draw your route on the map provided on the previous page.

#### 2. Flights.

a. Use the <u>internet</u> to find return flights from Canberra to Brisbane. Complete the tables below showing the date of travel, the destination, airline, flight number, cost of the fare, time of arrival and departure. Try to find the cheapest flights.

Date	Airline	Flight Number	Departing	Time of Departure	Arrival	Time of Arrival	Cost per Ticket
			Canberra		Brisbane		

Date	Airline	Flight Number	Departing	Time of Departure	Arrival	Time of Arrival	Cost per Ticket
			Brisbane		Canberra		

Total cost for you and your friend: \$ \_\_\_\_\_

- b. Is there a time difference between Canberra and Brisbane? If so, what is it?
- c. How long is the flight?
- d. Use <u>Google Maps</u> to determine how long it would take if you were to drive to Brisbane.

#### 3. Accommodation

Use <u>booking.com</u> or any other accommodation website to find suitable accommodation for your stay. You may choose to stay at the one place for the three nights or change accommodation sites.

Things to consider:

- Are you going to share a room with your friend?
- What inclusions are important to you?

#### Complete the table below and find the total cost for accommodation.

Day	City/Town	Accommodation name	Facilities available	Rating (stars)	Cost per night per room
Friday					
Saturday					
Sunday					

Total cost for you and your friend: \$ \_\_\_\_\_

#### 4. Transport

You will hire a car for your holiday. Your options are:

Type of car	Cost per day	Fuel economy	Driver protection	Stamp duty
Suzuki Swift	\$55	6.2L/100km	\$10 per day	
Mitsubishi Lancer	\$85	7.6L/100km	\$11 per day	
Holden SV6	\$120	11.0L/100km	\$15 per day	1.5% of total cost
Hyundai iMax (8 seater)	\$165	12.6L/100km	\$21 per day	
Mitsubishi Pajero (4WD)	\$158	10.6L/100km	\$18 per day	

- a. Choose your car from the options provided.
  - i. State the car chosen.
  - ii. Why did you choose this vehicle?
- b. For your chosen vehicle, calculate the:
  - i. Basic cost of car hire for 3 days
  - ii. Cost for driver protection/insurance for 3 days
  - iii. Stamp duty
  - iv. Total cost for car hire

- 5. **Fuel** 
  - a. Use <u>Google Maps</u> and your map on page 2 to estimate how many km you will drive during your holiday.

b. What is the fuel consumption (in L/100km) for your car? - See previous page

c. Work out how much fuel is needed for your trip.

d. Find the current cost of fuel/litre in Brisbane.

e. Find the total cost of fuel for your trip.

## 6. Activities

For each of the activities you chose in part 1, find and detail the costs associated. For example, entry costs per person, tour inclusions, etc.

Activity description	Cost

Total cost for you and your friend: \$ \_\_\_\_\_

#### 7. Budget

a. Complete the table below and calculate the total cost of the holiday.

Item	Cost
Flights (see part 2)	
Accommodation (see part 3)	
Car hire (see part 4)	
Fuel (see part 5)	
Activities (see part 6)	
Total	

b. How much would this be for each individual?

c. What other cost/s should you consider before travelling?

d. What else do you need to consider before travelling?

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CRITERIA	EXPECTATIONS	POSS	MULT	GIVEN	TOTAL
Practical	Student completes practical work, including exercises of the brief to an acceptable standard set by the teacher.	2	3		/6
Portfolio Task	Student completes the portfolio task of the week to an acceptable standard set by the teacher.	2	2		/4
Reasoning and Communications	Student responses are <b>accurate</b> and appropriate in presentation of mathematical ideas, with <b>clear</b> and logical <b>working out</b> shown.	4	-		/4
Concepts and Techniques	Student submitted work selects and applies <b>appropriate</b> mathematical modelling and <b>problem solving techniques</b> to solve practical problems, and demonstrates <b>proficiency</b> in the use of <b>mathematical facts</b> , <b>techniques</b> and <b>formulae</b>	4	-		/4
	Submission Guidelines				
Timeliness	Student submits the exercises and portfolio tasks by the set deadline. See scoring guidelines for specific details.	2	-		/2
		FINAL			/20

### Student Reflection:

How did you go with this week's work?

What was interesting?

What did you find easy?

What do you need to work on?