

Time Including Twenty-Four Hour Time – Conversion between 12 hour and 24 hour clock.



Example

Complete the following time conversions

	am/pm	24 hour
1.	3:45 pm	
2.	midday	
3.		1745 hours



Remember that all pm times have 12 hours added to make 24 hour time.

- 3:45 pm = (3 + 12 hours) (45 minutes)
= 1545 hours
- midday = 1200 hours
- 1745 = (17 – 12) (45) and it is pm
= 5.45 pm



Convert the following to 24 hour times.

- 7:34 am = _____
- 8:15 pm = _____
- midnight = _____
- 3:30 pm = _____
- 12 pm = _____
- 5 past 2 am = _____
- 8 min. to 6 pm = _____

Convert the following 24 hour times to am/pm times.

- 1030 hours = _____
- 1930 hours = _____
- 0900 hours = _____
- 0015 hours = _____
- 2356 hours = _____
- 1200 hours = _____



Application Problems

Answer the following questions.

- A TV show starts at 1945 hours and finishes at 2150 hours.
How long is the show? _____
- A film starts at 11:15 am and finishes at 1:10 pm
How long is the film? _____
- A TV film starts at 1945 hours and lasts for 2 hours 20 minutes.
When will it finish? _____
- A TV show is 1 hour 25 minutes long and it finished at 1935 hours.
When did it start? _____

A Freeview recorder has got a 24 hour display. What time will it need to be set, to record the following.

- A film starts at 10:40 pm and finishes at 1 o'clock in the morning. Start _____
End _____
- A rugby game starts at 2:30 in the morning and lasts 2 hours. Start _____
End _____



Application Problem

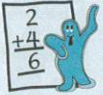
Anna is going on a journey starting at 0730. She first has a 15 minute taxi ride, then a 5 hour 20 minute train ride, followed by a 45 minute bus journey and finally a 6 minute walk. When will she reach her destination?

I found this work

Proportion completed

Date: _____

Tables – Use of simple tables and applications with timetables.



Example

The table below gives courier charges for books sent from Wanganui to major cities in New Zealand.

No. Books	North Island	South Island
6 or less	\$2.95	\$2.95
7 to 10	\$2.95	\$4.00
11 to 20	\$4.00	\$6.50
21 to 25	\$6.50	\$9.00
26 to 35	\$9.00	-

Use the table above to answer the questions.

- a) Cost of sending 7 books to Napier.
- b) What is the cheapest way you can send 40 books to Invercargill?



We know that Napier is in the North Island and Invercargill is in the South Island.

- a) 7 books to the Nth. Island = \$2.95
- b) 40 books to the Sth Island could be sent as 25 + 15 books or 2 x 20 books.
 25 + 15 books Sth. Island = \$9.00 + \$6.50 = \$15.50
 2 x 20 books to the Sth Island = \$13.00 cheapest



Application Problem

Answer the following questions using the table above.

- 1. 3 books to Nth Island = _____
- 2. 34 books to Auckland = _____
- 3. 17 books to Sth Island = _____

What is the cheapest solution to the following.

- 4. 40 books to Auckland = _____
- 5. 12 books to Nelson = _____
- 6. 80 books to Wellington = _____

What is the greatest number of books that could be sent with the following amount of money.

- 7. \$13 to Auckland = _____

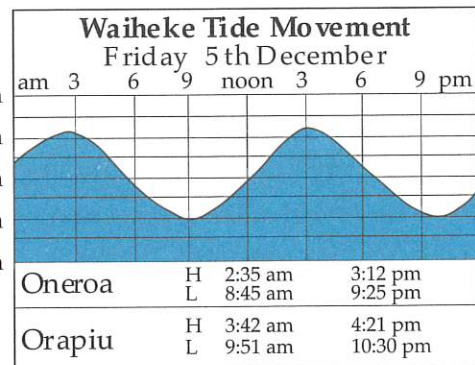
Use the table of fictitious section and house prices for different cities to answer the questions.

Place	Section cost	House + Section
Auckland	\$225 000	\$695 000
Hamilton	\$193 000	\$595 000
Napier	\$141 000	\$551 000
Wellington	\$215 000	\$612 000

- 8. Which place has the cheapest sections?

- 9. Which city has the cheapest house price (ignore the section cost)?

- 10. If you moved from Wellington to Auckland, how much more would you expect to pay for a house and section? = _____



- 11. What times are the high tide at Orapiu? = _____
- 12. What is the time between low tides at Oneroa? = _____
- 13. What is the height difference between high and low tide? = _____



Communication Problem

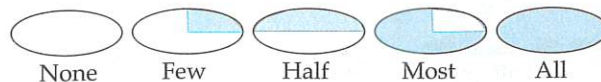
Use the information in the tide chart above to answer this question. A fishing boat can only sail if there is 2 m of tide. Write the earliest start, length and latest finishing times of a day fishing trip.

Start _____
 Length _____
 Finish _____



I found this work

Proportion completed



Date: _____