



# LITERACY AND NUMERACY TEST FOR INITIAL TEACHER EDUCATION STUDENTS

Numeracy

Practice Test

Questions



# Literacy and Numeracy Test for Initial Education Students

## Numeracy Practice Test

### Test information and instructions

Please note:

- This is the PDF version of the online numeracy practice test.
- While this is a practice test, the instructions below are based on those for the actual online test.
- You are advised to time yourself to provide the best simulation of the actual test.

Following the Tutorial, there are 65 questions in the numeracy test. The numeracy test has two sections:

- Section 1: 52 questions. In the actual test, an online calculator is available. You may use your personal calculator for this section. Allow 90-95 minutes.
- Section 2: 13 questions. A calculator is not permitted for this section. Allow 25-30 minutes.

You do not have to use the full 120 minutes. If you have finished the numeracy test earlier than the scheduled time, please indicate this to your test supervisor who will ensure you have completed all testing procedures.

After you have logged out, you will **not** be able to return to the test. You are allowed to use a pen and scrap paper. No other items are permitted in the test room unless you have been granted reasonable adjustments.

You are now going to do a short tutorial and some numeracy practice questions to help you navigate the test. You can click on 'Start test' to continue.

## Tutorial

This tutorial will help you to navigate the numeracy test that you are about to do. There are 65 questions in the numeracy test. You will have 120 minutes to do the test.

The number of questions is shown in a panel at the top of the screen. When you have answered a question, the box containing the question number will change to black. You can use the panel at the top of the screen to go back and change an answer, or answer a question you have missed.

The questions are presented in sets with a common theme or text. The name of the set of questions is shown underneath the panel of question numbers at the top of the screen. For example, this set is called **Tutorial**. The number of questions in each set is also shown at the start of the question prompt region. For example, **Tutorial: question 1 of 4**.

You are now going to practise answering different types of questions.

Answer the question and then click on 'Next' to continue.

**1**

For multiple-choice questions, you need to click on one of the options.

You can change your answer by clicking on a different option.

How many numeracy questions are there?

- A. 8
  - B. 10
  - C. 65
  - D. 120
-

## 2

For this type of multiple-choice question, you need to click on one option in **each** row.

You can change your answer by clicking on a different option.

If you miss any rows, a pop-up box will alert you that the answer to the question is incomplete.

Are the statements below true or false?

Click on 'True' or 'False' for each statement.

Statement	True	False
For this kind of question you need to click one option in each row.	T	F
The question number in the panel at the top of the screen will change to black only if you have fully answered the question.	T	F
You will have 120 minutes to do the test.	T	F

---

## 3

For questions with an answer space, you need to type your answer.

You can change your answer by deleting it and entering a new answer.

Almost all numeracy questions require a **numeric** response only. For these questions, if you try to enter a non-numeric response, a pop-up warning will be given and the non-numeric response will **not** be saved. For example, you should **not** enter words or units of measurement (e.g. \$, %, metres, hours) where units are given before or after the answer space. You should **not** write your answer as a complete sentence.


How many cents are in one dollar?


--

 cents

## Calculator practice question

Please read **all** this information.

- **Open** the calculator by clicking on the icon  in the top right corner of the screen.
- The calculator can be **dragged** around the screen using the mouse.
- Numbers and operations can be selected using either the **mouse** or the **keyboard**.
- The answer is displayed when you click on the '=' button.
- The answer displayed in the calculator can be **transferred** to the answer

box by clicking on the blue calculator icon  beside the answer box. The answer displayed is also temporarily stored in 'Ans' and may be used for the next calculation.

- To **close** the calculator, click again on the icon in the top right corner of the screen. The calculator closes automatically each time you move to the next question.

Now please use the onscreen calculator to answer the practice question.  
(For this PDF version you should use your own calculator to answer section 1.) After you have answered the practice question, click on 'Next' to continue.

4

This year a teacher spent \$383.30 on stationery.

Last year the teacher spent \$257.85 on stationery.

How much more did the teacher spend this year than last year?

\$

## Section 1: Calculator Available

### Gym Membership

This table shows different levels of gym membership.

Level	Joining fee	Monthly fee
Basic	\$20	\$10
Bronze	\$30	\$15
Silver	\$40	\$20
Gold	\$50	\$25

1

What is the total cost for the first year of a Silver membership?

\$

2

Which formula shows how to calculate the total cost for  $n$  months, where  $n$  is any number?

- A. Joining fee + Monthly fee +  $n$
- B. Joining fee + (Monthly fee  $\times n$ )
- C. (Joining fee + Monthly fee)  $\times n$
- D. Joining fee + (Monthly fee  $\times 12 \times n$ )

3

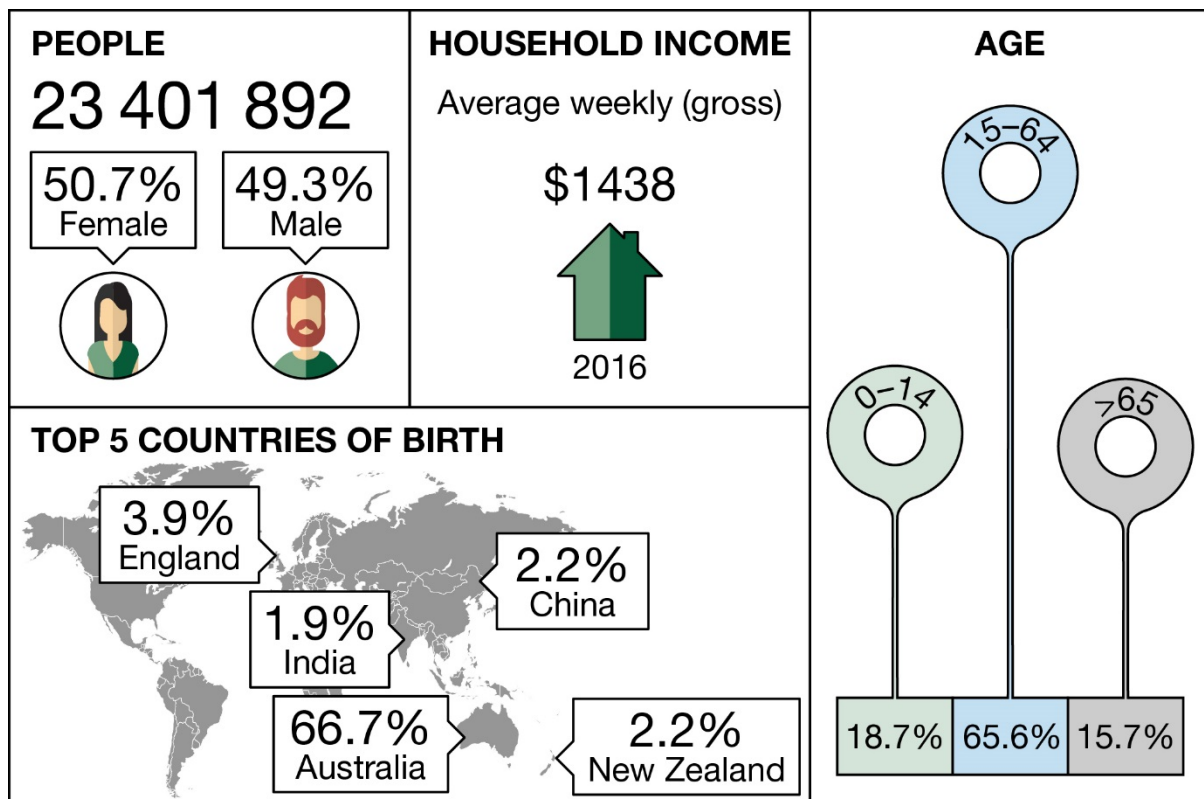
Sam is considering joining the gym and paying for a 3-month membership.

How much more would Sam pay at Gold level compared to Basic level?

\$

## Infographic

This infographic shows some statistics about people in Australia from the 2016 census.



Based on Australian Bureau of Statistics data, 2016

4

Below are some statements about the infographic.

Click on 'True' or 'False' for each statement.

Statement	True	False
More than 12 million people in Australia in 2016 were male.	T	F
The number of people aged 15 years and over was more than 5 times the number of people aged 14 years and under.	T	F
Approximately one-third of people were not born in Australia.	T	F



5

Which of the following values is closest to the average **yearly** gross household income?

Assume the weekly income is received for each week of the calendar year.

- A. \$37 000
- B. \$69 000
- C. \$72 000
- D. \$75 000

### **Surfboard Hire**

A surf shop has surfboards for hire at \$15 per hour (or part of an hour) up to a maximum of \$60 per day.

**6**

What is the cost of hiring a surfboard from 9:30 am to midday on the same day?

\$ \_\_

### **Running Distance**

A 3000-metre running course has three drink stations.

The distances between the start and station 1, between the stations themselves, and between station 3 and the finish, are all equal.

**7**

What is the distance between each drink station?

\_\_ metres

## Canteen Time

The Student Council at a school conducted a survey of waiting time at the canteen. This table shows the waiting time for 183 students.

Waiting time (minutes)	Number of students
0–<2	8
2–<4	26
4 –<6	59
6 –<8	46
8 –<10	35
10 –<12	4
12 –<14	3
14–<16	2

8

How many students waited for at least 10 minutes?

9

Below are some statements about the table.

Click on 'True' or 'False' for each statement.

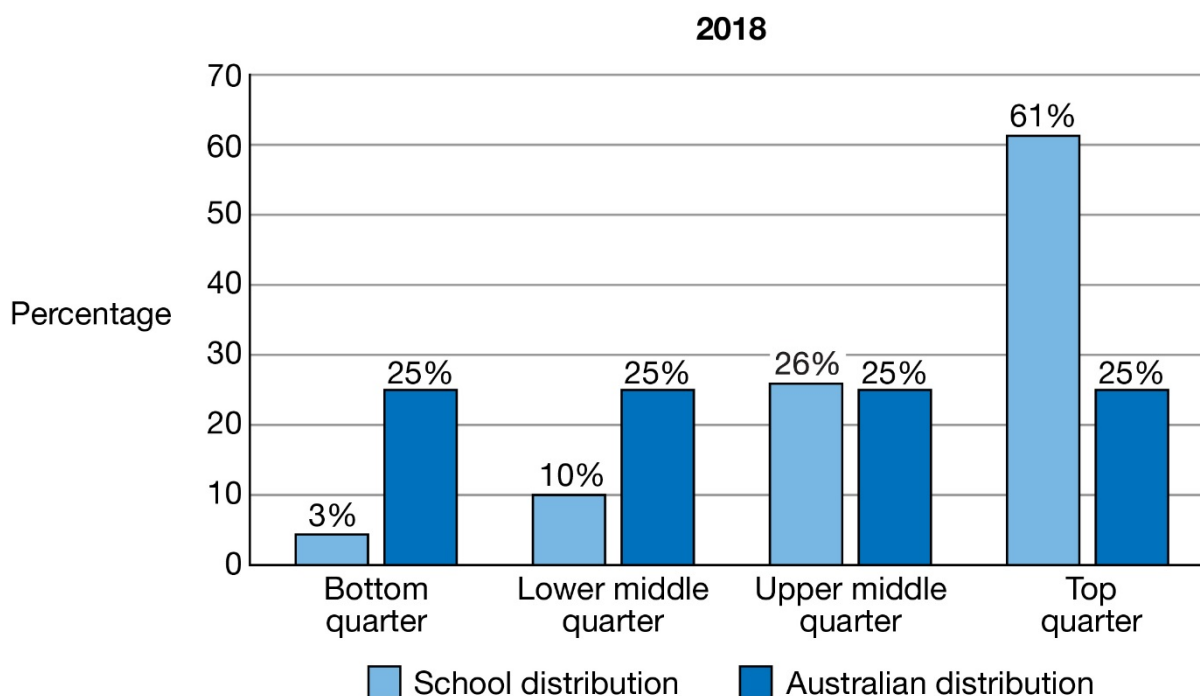
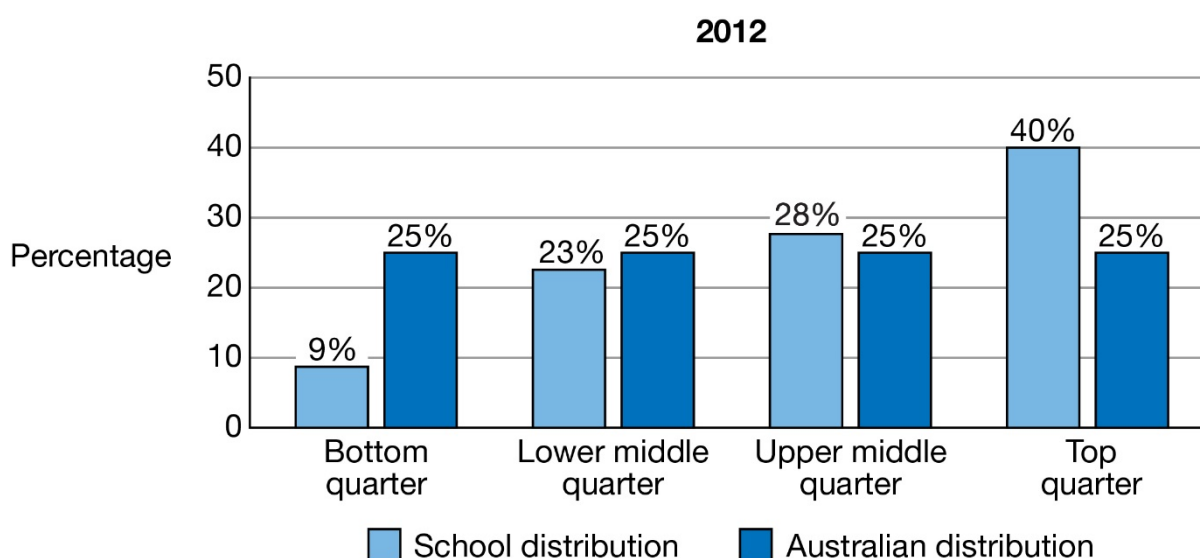
Statement	True	False
The median waiting time was in the interval 4-<6 minutes.	T	F
The mean waiting time can be estimated by dividing the total waiting time by 8.	T	F

## Socio-Educational Advantage

The Index of Community Socio-Educational Advantage (ICSEA) measures the relative educational advantage of schools in Australia. Based upon family background data, the student population is distributed across four quarters.

These two graphs show how the distribution of students has changed for a school between 2012 and 2018.

The total number of enrolments at the school was 172 in 2012 and 495 in 2018.



Adapted from: MySchool website, ACARA, 2018

## 10

Below are some statements about the graphs.

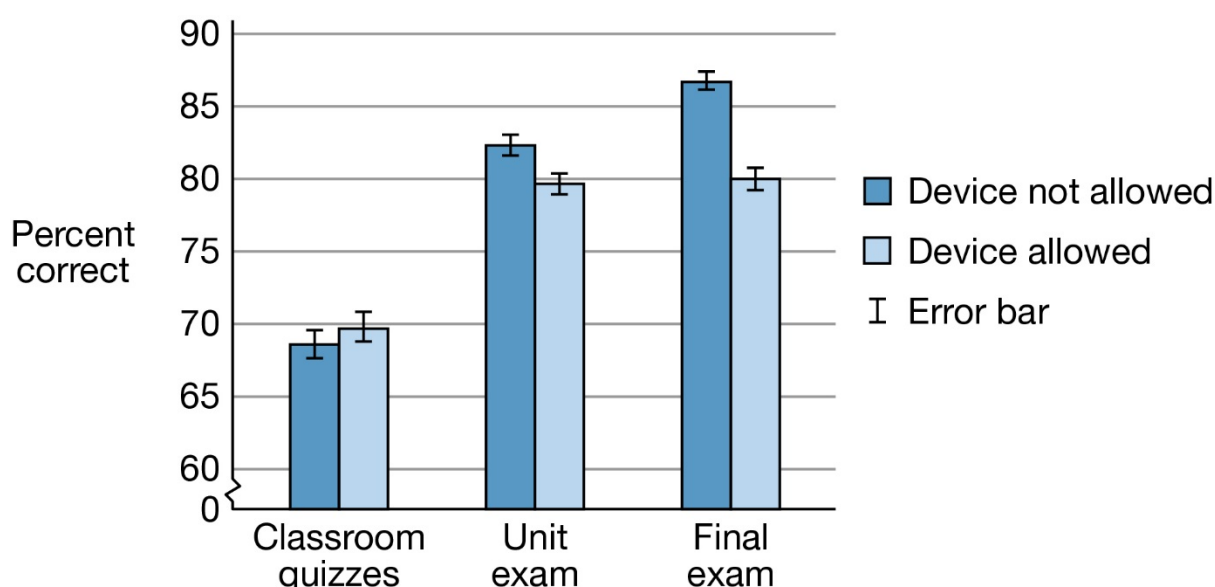
Click on 'True' or 'False' for each statement.

Statement	True False	
In 2018, more than three-quarters of the students at the school were located in the two highest quarters.	<input type="radio"/> T	<input type="radio"/> F
The distribution of students at the school across the quarters was more similar to the Australian distribution in 2012 than in 2018.	<input type="radio"/> T	<input type="radio"/> F
The <b>number</b> of students at the school in the upper middle quarter decreased from 2012 to 2018.	<input type="radio"/> T	<input type="radio"/> F

## Electronic Devices

In a study of how the use of electronic devices in class affected achievement, some students were allowed to use electronic devices while others were not.

This graph shows the percentage of correct student responses on three types of assessment: classroom quizzes, a unit exam and a final exam. Non-overlapping error bars indicate significant difference.



Adapted from: International Journal of Experimental Educational Psychology, 2018

11

Below are some statements about the graph.

Click on 'True' or 'False' for each statement.

Statement	TrueFalse	
For the <b>final</b> exam results, students who were not allowed to use electronic devices in class achieved a higher percentage of correct responses than students who were allowed to use electronic devices.	T	F
For students who were not allowed to use electronic devices in class, the percentage of correct responses on the unit exam was more than double the percentage of correct responses on classroom quizzes.	T	F
Significant differences in achievement between the two groups of students were found only on the final exam.	T	F

## Sport Day

A teacher is organising an inter-school sport day. There are 8 teams in the competition.

Each team must play one game against each of the other teams.

12

The following formula can be used to determine the total number of games.

$$\text{total number of games} = \frac{\text{number of teams} \times (\text{number of teams} - 1)}{2}$$

What is the total number of games?

13

The teacher uses a systematic method to ensure that each team plays each other team once. These tables show the four games for each of the first three rounds.

### Round 1

Game 1	Game 2	Game 3	Game 4
Team 1	Team 2	Team 3	Team 4
Team 8	Team 7	Team 6	Team 5

### Round 2

Game 1	Game 2	Game 3	Game 4
Team 1	Team 8	Team 2	Team 3
Team 7	Team 6	Team 5	Team 4

### Round 3

Game 1	Game 2	Game 3	Game 4
Team 1	Team 7	Team 8	Team 2
Team 6	Team 5	Team 4	Team 3

Continuing the method, which team plays Team 7 in **Round 4**?

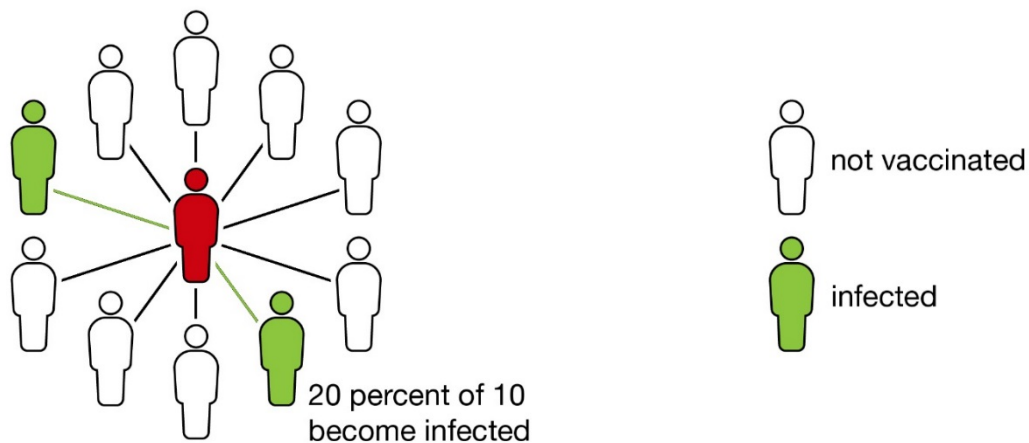
Team

## Infection Model

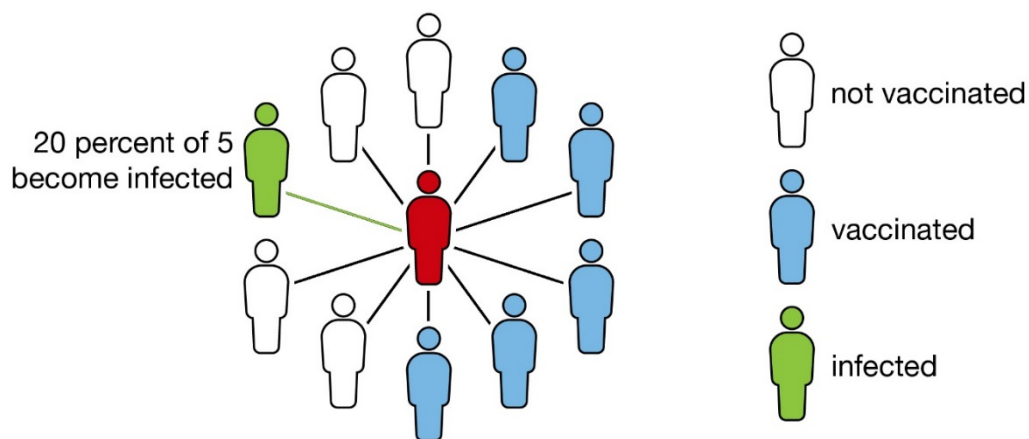
This is a simple example of how people in a community might become infected with a disease.

One infectious disease has a reproduction rate of 20%.

For example, if a person with the disease encounters 10 people while infected, then 2 people (20% of 10 people) are likely to be infected.



However, with a vaccination rate of 50%, where 50% of the 10 people are vaccinated against the disease, then only 1 person (20% of 5 people) is likely to be infected.



from: Quantamagazine, 2018

Adapted

14

A highly infectious disease has a reproduction rate of 60%.

If the vaccination rate is 95%, how many people in a population of 1000 are likely to be infected?



## Pasta Information

This is part of the information on a 500 gram packet of pasta.

Servings per pack: 3

Serve size: 167 g

Nutrient	Average quantity per serve	Average quantity per 100 g
<b>Fat</b>		
Total	0.3 g	0.18 g
Saturated	0.03 g	0.02 g
<b>Sodium</b>	668 mg	400 mg

Note: amounts have been rounded

15

Using the information **per serve**, what percentage of the total fat is the saturated fat?

 %

16

The National Health and Medical Research Council (NHMRC) has set an 'adequate intake' of 460–920 mg of sodium per day.

Below are some statements about the information provided.

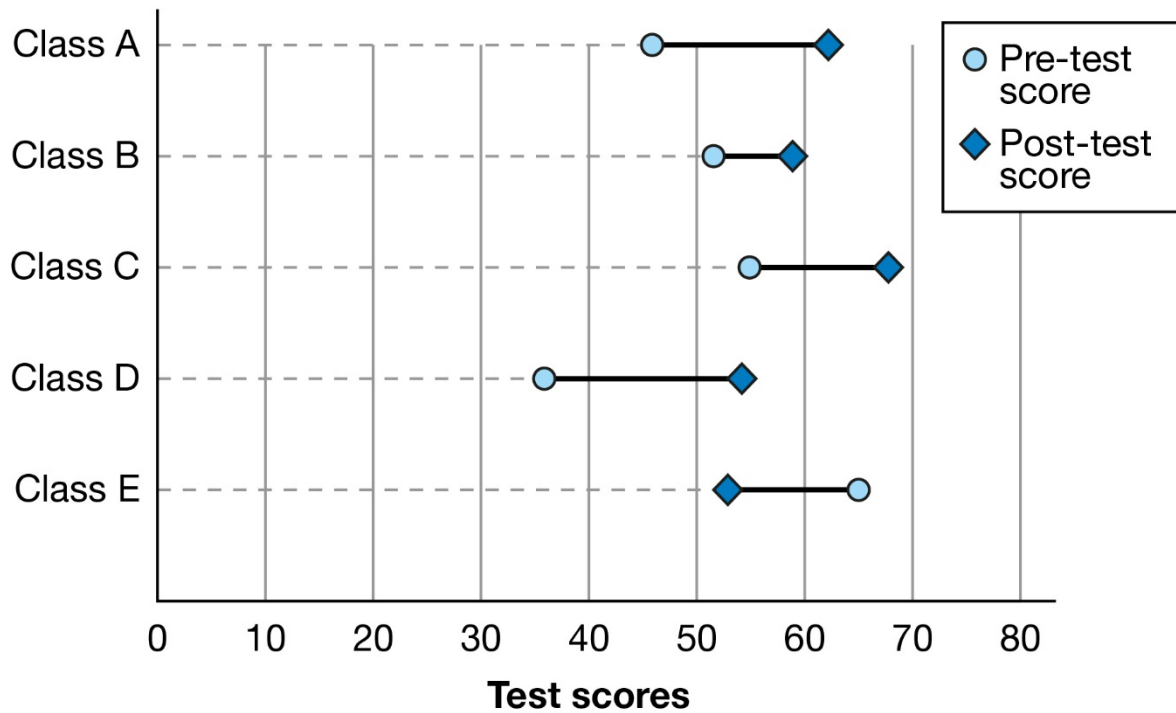
Click on 'True' or 'False' for each statement.

Statement	True	False
The amount of sodium in <i>two</i> serves of the pasta exceeds the maximum NHMRC daily 'adequate intake'.	T	F
The maximum NHMRC daily 'adequate intake' of sodium is less than one gram.	T	F

### Pre-test Post-test

Five classes in one Year level studied the same topic. The students completed a pre-test at the beginning of the topic and a post-test at the end of the topic.

This chart shows the mean scores for each class. Most classes showed higher mean scores on the post-test.



17

Which class showed the greatest increase from mean pre-test score to mean post-test score?

- A. Class A
- B. Class B
- C. Class C
- D. Class D
- E. Class E

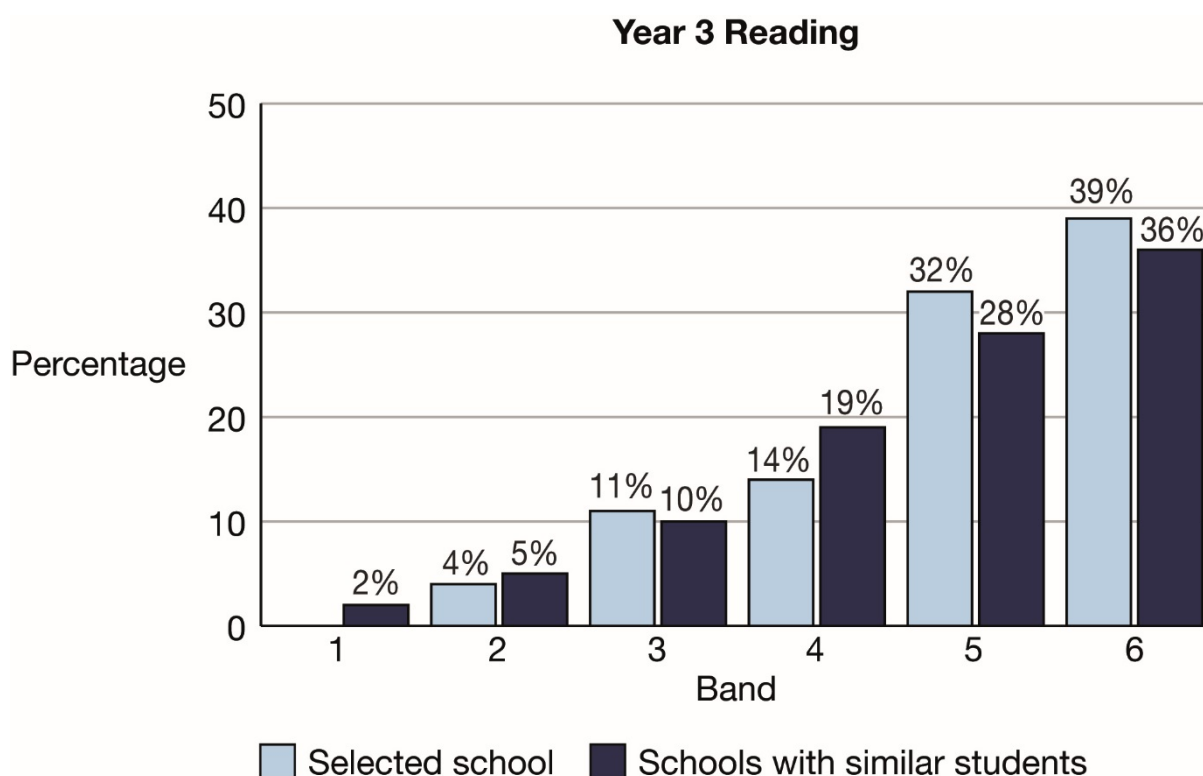
18

How many classes showed **increases** of more than 10 between their mean pre-test and post-test scores?

classes

## NAPLAN Results

This graph shows the percentage of Year 3 students at a selected school in each of six Bands on the National Assessment Program – Literacy and Numeracy (NAPLAN) Reading test, compared to schools with similar students.



Adapted from: MySchool website, Australian Curriculum, Assessment and Reporting Authority (ACARA), 2018

**19**

Below are some statements about the graph.

Click on 'True' or 'False' for each statement.

Statement	True	False
The difference between the total percentage of students at the selected school who are in Bands 5 or 6, and the total percentage of students at schools with similar students who are in Bands 5 or 6, is more than 10%.	T	F
More than one-third of the Year 3 students in schools with similar students have Reading scores in Band 4 or below.	T	F

## Casual Teacher

In 2019, casual relief teachers in one state are paid \$60.78 per hour, before tax. The rate of pay is also applied on a pro-rata basis (proportionally) for part of an hour.

**20**

A teacher begins a casual relief position at a school at 8:45 am and finishes at 12:15 pm on the same day.

How much will the teacher be paid, before tax?

\$

### Excursion Staff

At a pre-school there are 2 educators and 22 students.

They are planning an excursion to the local park.

For the excursion, a ratio of at least one adult to every 3 students is required.

21

What is the smallest number of **additional** adults that are required for the excursion?

### Parliament Members

This table shows the number of members of the Senate and the House of Representatives in each jurisdiction of Australia.

Jurisdiction	Number of members of the Senate	Number of members of the House of Representatives
New South Wales	12	47
Victoria	12	38
Queensland	12	30
Western Australia	12	16
South Australia	12	10
Tasmania	12	5
Australian Capital Territory	2	3
Northern Territory	2	2
<b>Total</b>	<b>76</b>	<b>151</b>

22

The population of Queensland is approximately 5 million people.

In Queensland, what is the average number of people represented by each member of the House of Representatives?

Round your answer to the **nearest thousand**.

## Paint Purchase

A teacher purchases a bulk pack of twelve 2-litre bottles of paint.

The pack normally sells for \$210 but the teacher receives a 5% discount on the pack.

The teacher also buys three extra bottles at the regular price of \$17.95 each.



23

What is the total cost of the teacher's purchase?

\$

## Year 12 Results

This table shows Year 12 enrolments and a summary of the results for three schools.

Schools	Number of students enrolled	Median score	Percentage of scores of 40 and over*
School A	85	33	20
School B	145	34	24
School C	212	29	10

\*rounded to the nearest whole percent

**24**

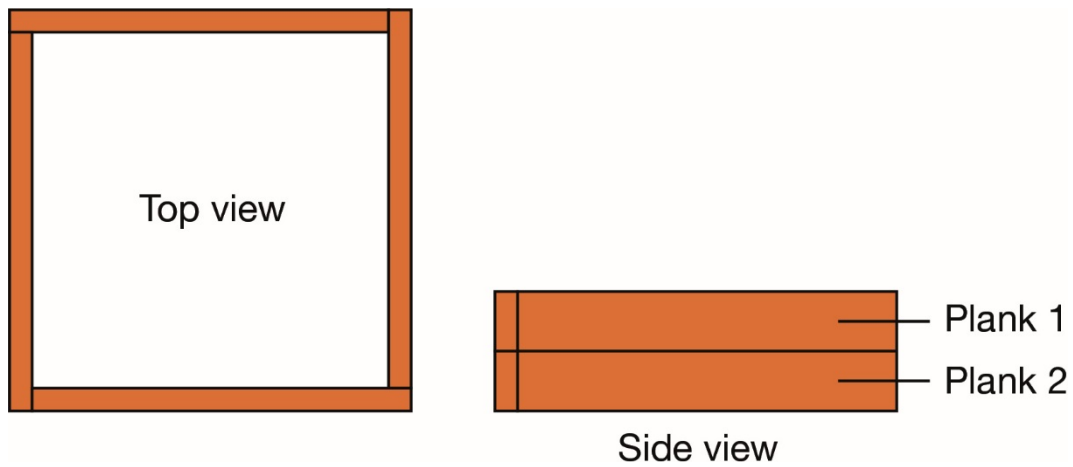
Below are some statements about the table.

Click on 'True', 'False', or 'Not possible to determine' for each statement.

Statement	True	False	Not possible to determine
The student with the highest score was enrolled at school B.	T	F	N
The number of students at school A with scores of 40 and over is two times the number of students at school C with scores of 40 and over.	T	F	N

## Garden Bed

This diagram shows two views of the frame of a square garden bed.



25

The cost of each plank is \$15.

What is the total cost of the planks needed to make the frame?

\$

26

The dimensions of each plank are:

- length 2.4 m
- width 0.2 m
- thickness 0.05 m

Which of these is closest to the volume of the soil needed to fill the frame of the garden bed?

- A. 1 cubic metre
- B. 2 cubic metres
- C. 4 cubic metres
- D. 6 cubic metres
- E. 10 cubic metres



## Weather Forecast

This is the forecast for Smithstown.



27

Below are some statements about the forecast.

Click on 'True' or 'False' for each statement.

Statement	True False	
	T	F
On the day of the forecast, the chance of rain in Smithstown is less than the chance of no rain in Smithstown.	<input type="checkbox"/>	<input type="checkbox"/>
If 3 mm of rain falls in Smithstown on the day of the forecast then the forecast was inaccurate.	<input type="checkbox"/>	<input type="checkbox"/>

## Pasta Mass

A food guide for secondary school camps includes the following advice:

*For pasta meals, use 120 grams of dried pasta per person.*

**28**

A group of 22 students and 3 adults attend a school camp.

How much dried pasta, in kilograms, is required to make one meal for everyone?

kilograms

## Test Mean

A teacher gives the same test to two different classes and summarises the test scores in a table.

Class	Number of students	Minimum	Maximum	Range	Mean
Class A	20	14	19	5	17
Class B	22	11	18	7	13

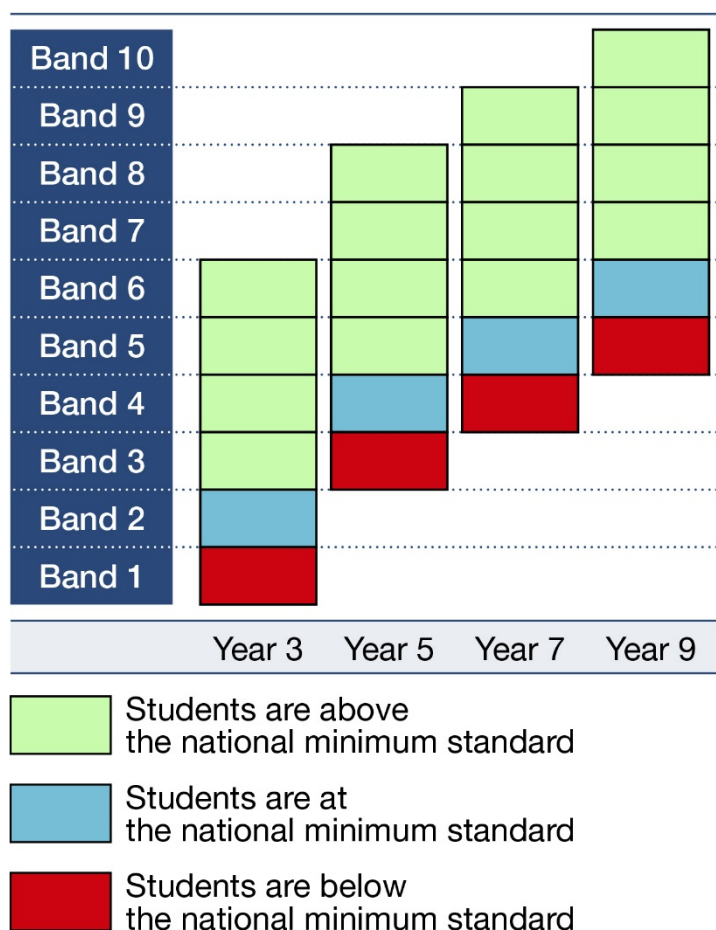
**29**

What is the range of the scores if the scores from both classes are combined?

## Reported Bands

This graph shows how the National Assessment Program – Literacy and Numeracy (NAPLAN) reports student achievement in Years 3, 5, 7 and 9.

### Literacy and Numeracy National Assessment Scale



Adapted from: MySchool website, Australian Curriculum, Assessment and Reporting Authority (ACARA), 2018

30

Below are some statements about the graph.

Click on 'True' or 'False' for each statement.

#### Statement

#### True False

The National Minimum Standard for Year 3 is Band 2.

T F

There are two bands that are common to the four Year levels.

T F

From each Year level to the next Year level, only one new band is reported and only one previous band is not reported.

T F

## Food Dye

Food dye comes in 4 colours: red, blue, yellow and green.

This table shows how to make additional colours by combining drops in the correct **proportions**.

	Red	Blue	Yellow	Green
Orange	1		2	
Purple	3	1		
Dark Green	1	4	1	
Lime Green			3	1
Aqua		2		1
Orchid	5	1		

**31**

Which colour is made by combining 4 drops of blue and 2 drops of green?

- A. purple
- B. dark green
- C. aqua
- D. orchid

**32**

A recipe calls for  $\frac{1}{4}$  teaspoon (20 drops) of lime green.

How many drops of yellow are needed?

## Fundraising Report

This summary of a school's fundraising achievements was included in the newsletter.

It has been a fabulous year of fundraising, with \$12,000 raised in total by our school community. The total includes \$600 raised from lunch events, \$4000 from the craft and baking stalls, \$2400 from the Trivia Night, \$2000 from school discos plus thousands of dollars from other events. Well done to our group of hardworking volunteers!

33

Below are some statements about the summary.

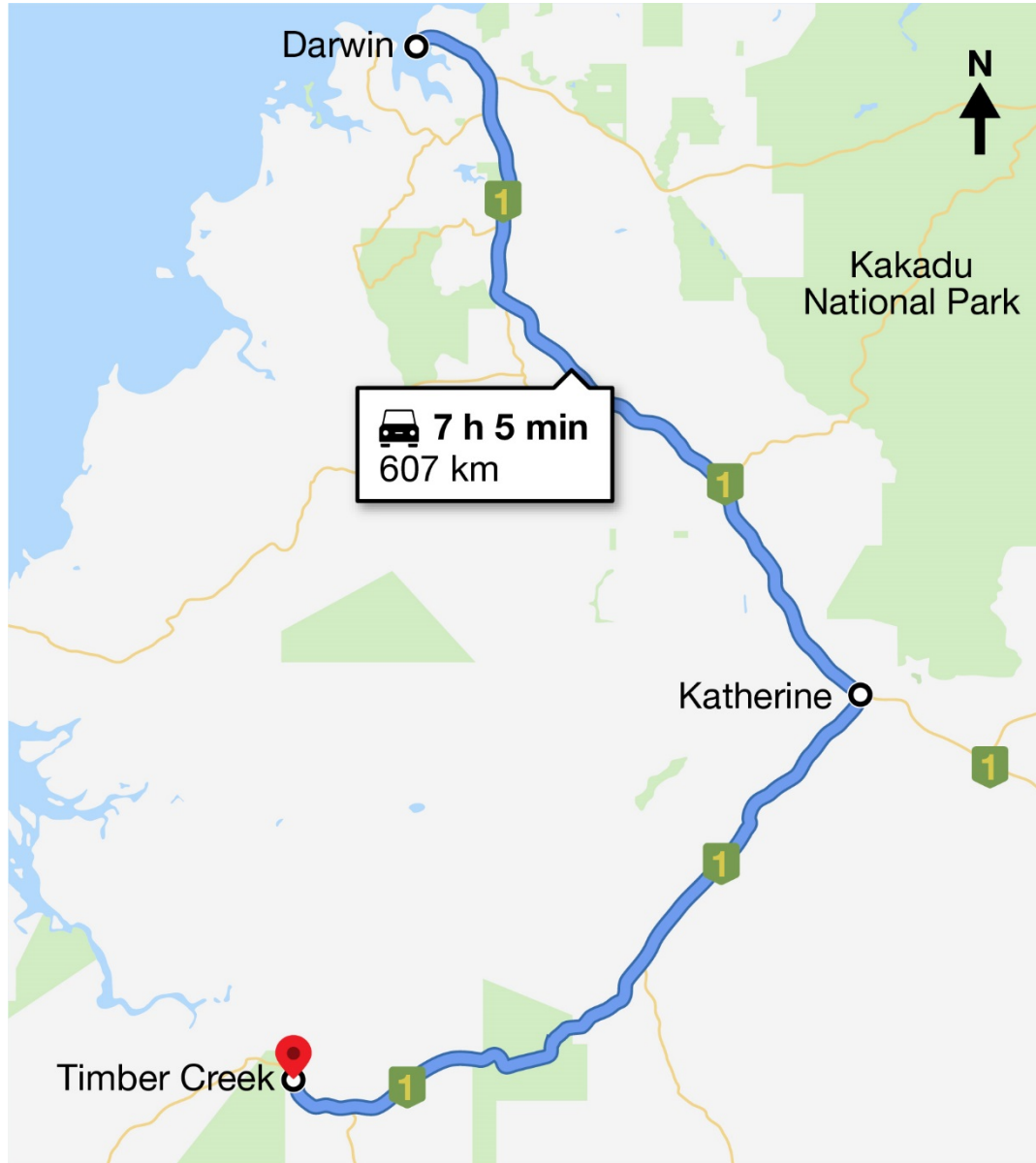
Click on 'True' or 'False' for each statement.

Statement	True	False
One-quarter of the total amount raised was from 'other events.'	<input type="radio"/>	<input type="radio"/>
Exactly 30% of the total amount raised can be attributed to the craft and baking stalls.	<input type="radio"/>	<input type="radio"/>
The amount raised from the Trivia Night was four times the amount raised from the lunch events.	<input type="radio"/>	<input type="radio"/>

## Timber Creek

A teacher wishes to drive from Darwin to Timber Creek school.

This map shows the distance and the estimated **driving** time for the route.



34

Which set of directions best describes the route?

- A. Drive south-east on Highway 1. At Katherine turn left and stay on Highway 1
- B. Drive south-west on Highway 1. At Katherine turn left and stay on Highway 1
- C. Drive south-east on Highway 1. At Katherine turn right and stay on Highway 1
- D. Drive south-west on Highway 1. At Katherine turn right and stay on Highway 1

**35**

The teacher leaves Darwin at 8:30 am and drives for 3 hours and 10 minutes to Katherine. After a 45 minute rest-stop, the teacher leaves Katherine for Timber Creek.

When should the teacher arrive at Timber Creek?

- A. 3:35 pm
- B. 4:20 pm
- C. 5:35 pm
- D. 6:20 pm

## Real Estate Prices

These tables show the prices of 8 houses and 11 units sold in a regional city in one month.

The prices have been ordered from lowest to highest and rounded to the nearest ten thousand dollars.

House prices	Unit prices
\$300,000	\$260,000
\$320,000	\$270,000
\$330,000	\$280,000
\$340,000	\$280,000
\$360,000	\$280,000
\$380,000	\$290,000
\$410,000	\$290,000
\$790,000	\$300,000
	\$300,000
	\$320,000
	\$340,000

36

Below are some statements about the prices.

Click on ' True' or 'False' for each statement.

Statement	True	False
The range of the house prices is more than five times the range of the unit prices.	T	F
The median house price is \$60,000 more than the median unit price.	T	F



### Step Challenge

Two students at a school participate in a step challenge to raise money for charity.

They record the number of steps they walk each day for one 10-week term.

This table shows the steps they have recorded at the end of **week 6** (42 days).

Name	Total number of steps
Gabrielle	262 000
Shay	366 000

**37**

Gabrielle wants to reach a total of 500 000 steps at the end of week 10.

What is the average number of steps Gabrielle will need to walk **each day** for the next 4 weeks (28 days) to reach her goal?

steps each day

**38**

Shay is sponsored at \$1 for every 1000 steps he walks during the challenge.

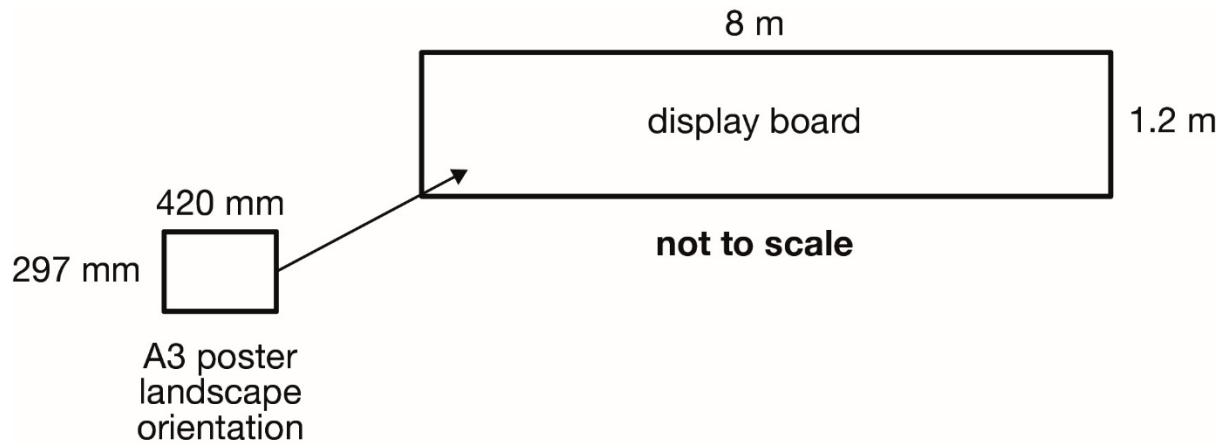
If Shay maintains the same average number of steps per week as in the first 6 weeks, how much will he have raised in total at the end of week 10?

\$

## Display Board

A rectangular display board on a classroom wall is 1.2 metres high and 8 metres long.

A teacher wishes to place A3-size posters onto the board in landscape orientation.

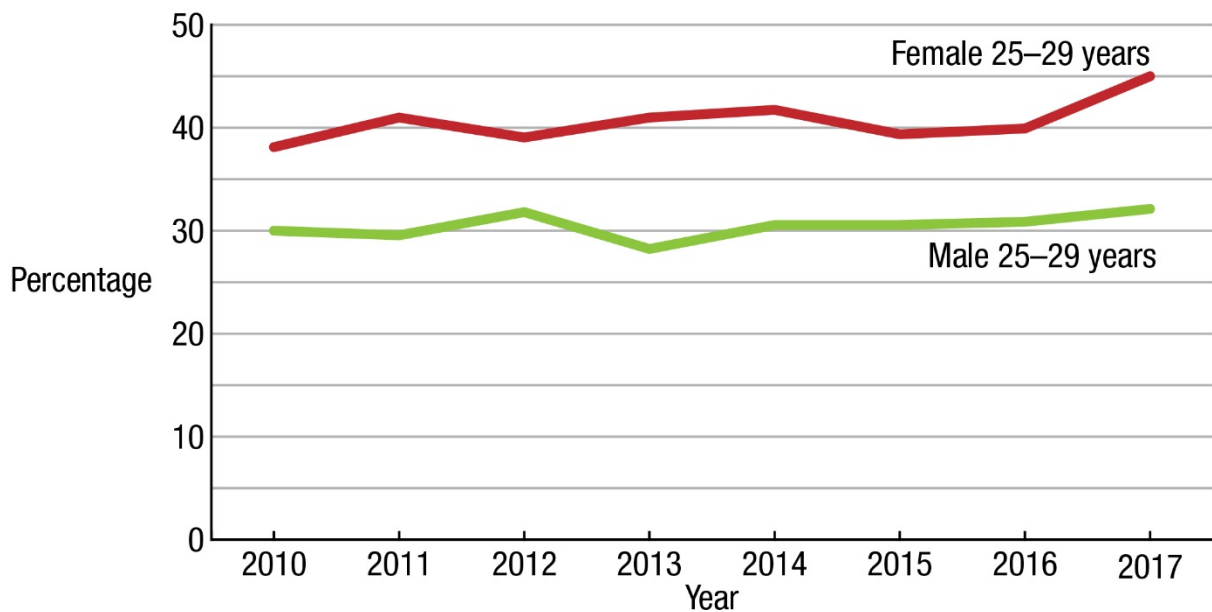


**39**

What is the largest number of A3-size posters that can fit onto the board without overlapping?

## Bachelor Degree

This graph shows the percentage of males and females aged 25 to 29 years who had attained a Bachelor degree or above in the period 2010 to 2017.



40

Below are some statements about the graph.

Click on 'True' or 'False' for each statement.

Statement	True False	
	T	F
In 2017, more than 40% of females aged 25 to 29 years had attained a Bachelor Degree or above.	T	F
In 2012, the difference in the percentage of females and males aged 25 to 29 years who had attained a Bachelor Degree or above was less than 10%.	T	F

## Class Marks

In Semester 1 a teacher has given four assessments: two tests and two projects. This spreadsheet shows the marks obtained by six students in the class.

	A	B	C	D	E	F	G
1	Student	Term 1 Test score	Term 1 Project score	Term 2 Test score	Term 2 Project score	Total score on tests	Total score on projects
2	John	16	12	18	14		
3	Katy	22	15	26	12		
4	Jelena	23	19	20	16		
5	Jack	19	18	22	15		
6	Anna	19	9	24	8		
7	Rory	27	17	29	19		

### About spreadsheets ...

Each cell is referred to by the column letter and row number. For example 'John' is in cell A2.

\* stands for multiplication  
/ stands for division

41

Which cells would the teacher use to calculate John's total score on the **tests**?

- A. B2, C2, D2 and E2
- B. B2, B3, B4 and B5
- C. B2 and D2
- D. D2 and E2

## Order Form

A teacher plans to order at least 500 dice for the school equipment store.

The best price the teacher can find is containers of 72 dice at \$19.95 per container.

**42**

Complete the order form so that the required number of dice are ordered for the least cost.

Description	Quantity	Unit price	Total price
Container of 72 dice		\$19.95	\$

## Fuel Consumption

The amount of fuel that cars use to travel a distance is called their fuel consumption and is measured in litres per 100 km.

A particular SUV car has a fuel consumption of 6 litres per 100 km and a fuel tank size of 57 litres.

**43**

How many litres of fuel does the SUV use to travel 350 kilometres?

--

 litres

**44**

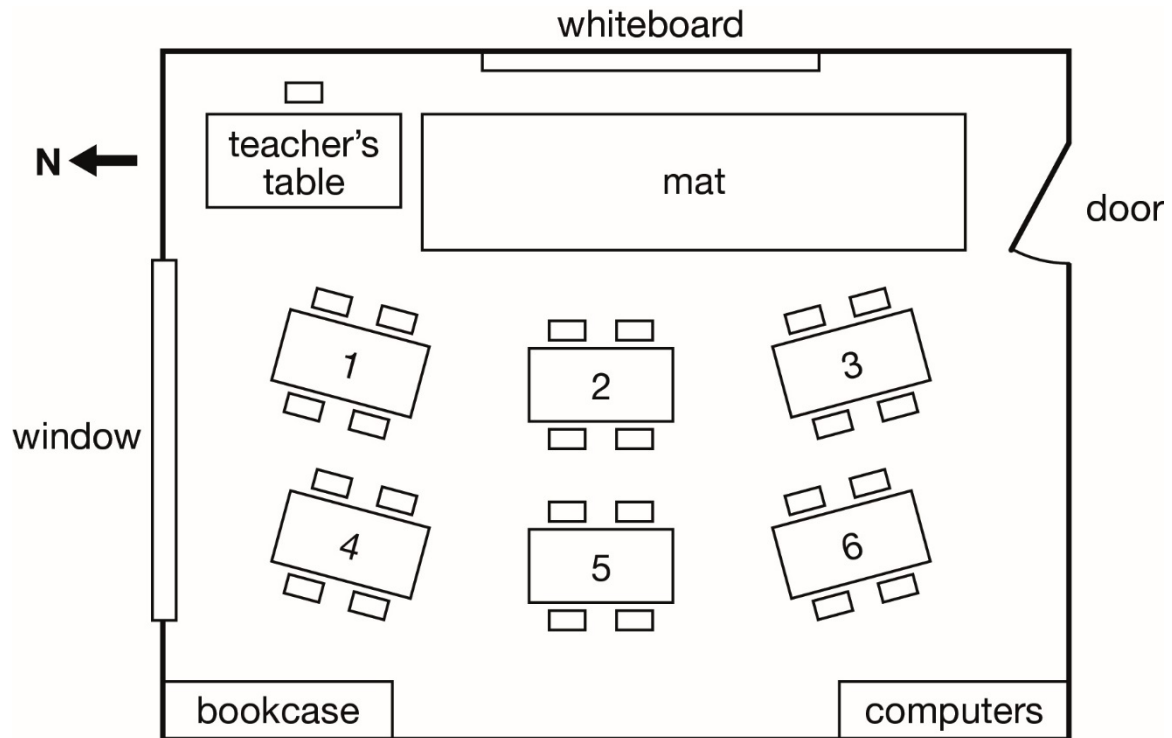
Which distance is closest to the maximum distance that the SUV can travel on one full tank of fuel?

- A. 340 kilometres
- B. 600 kilometres
- C. 950 kilometres
- D. 5700 kilometres

## Classroom Plan

This is a plan of a classroom. It shows the direction of north.

The teacher's table is located in the front corner of the classroom. Four students sit at each of the six tables as shown.



45

Below are some statements about the plan.

Click on 'True' or 'False' for each statement.

### Statement

### True False

The door is located near the south-east corner of the classroom.

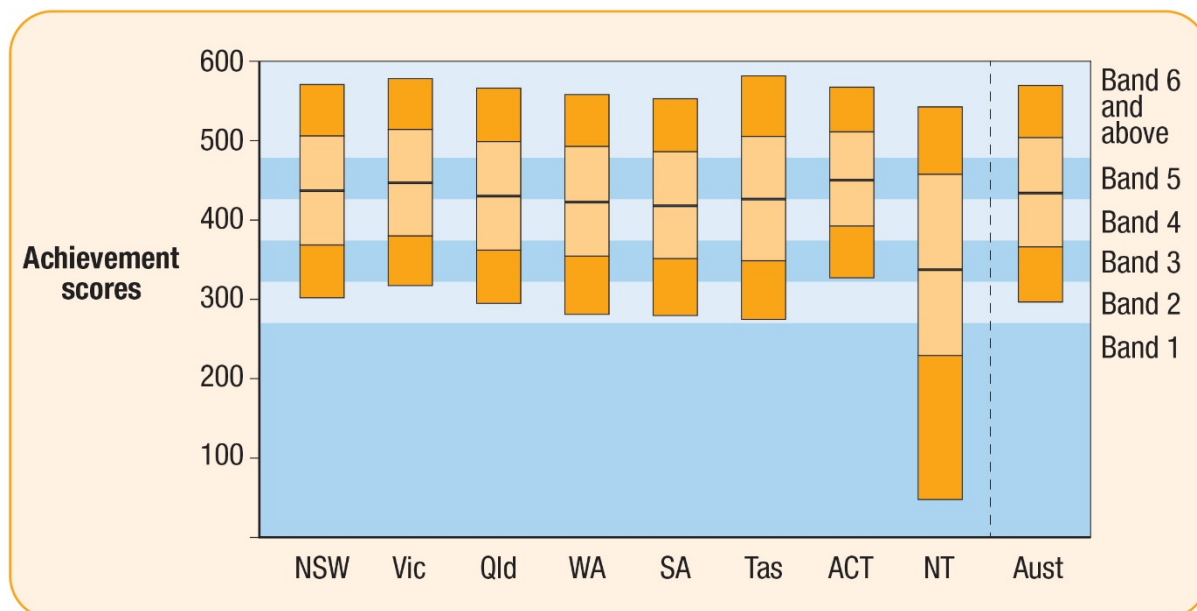
T F

Looking from the teacher's table, facing the back of the room, the computers are in the back right corner of the classroom.

T F

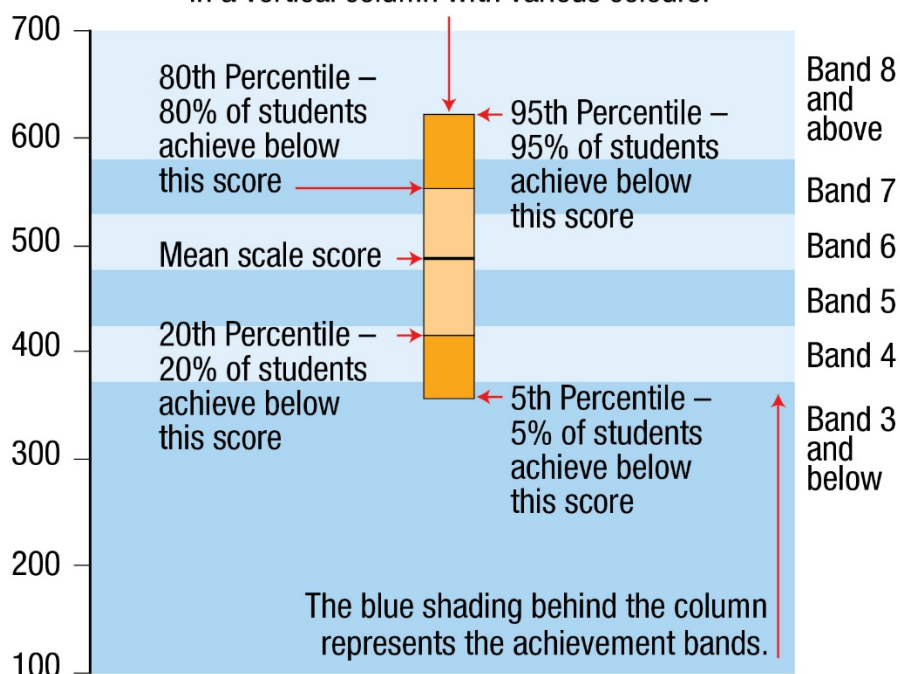
## Year 3 Results

This graph shows the National Assessment Program – Literacy and Numeracy (NAPLAN) 2018 Reading results for Year 3 for the eight jurisdictions and also for Australia overall.



### Key

Each group's results are represented in a vertical column with various colours.



Adapted from the National Assessment Program–Literacy and Numeracy Achievement in Reading, Writing, Language Conventions and Numeracy: National Report for 2018, Australian Curriculum, Assessment and Reporting Authority (ACARA)

46

For which jurisdiction were the scores of at least 95% of Year 3 students above Band 2 for Reading?

- A. NSW
- B. Vic
- C. Qld
- D. ACT

47

For how many **jurisdictions** were the scores of at least 20% of Year 3 students at Band 6 or above for Reading?



## ATAR Scores

This is an incomplete cumulative frequency table of ATAR scores for the 80 students at a school. Two percentages are missing from the table.

ATAR score category	Percentage	Cumulative Percentage
90 or above	13%	13%
80–89.99	18%	31%
70–79.99	22%	53%
60–69.99	25%	78%
50–59.99	10%	88%
40–49.99	8%	
Less than 40		100%

48

Below are some statements about the table.

Click on 'True' or 'False' or 'Not possible to determine' for each statement.

Statement	True	False	Not possible to determine
The median ATAR score is in the range 70–79.99.	T	F	N
78% of the students achieved an ATAR score greater than or equal to 50.	T	F	N
The lowest ATAR score was 30.	T	F	N

49

Part of the original table is duplicated here.

Complete the missing percentages.

ATAR score category	Percentage	Cumulative Percentage
40–49.99	8%	%
Less than 40	%	100%

## Grade Point Average

The Grade Point Average (GPA) is the average of all grades achieved throughout a course.

A 4-point GPA scale assigns *grade values* as follows: High distinction (4.0), Distinction (3.0), Credit (2.0) and Pass (1.0).

Each Unit in a course is assigned a number of *points* which are used to weight the grade value for the Unit.

$$\text{weighted grade value} = \text{grade value} \times \text{points}$$

These *weighted grade values* are then averaged to give the GPA.

$$\text{GPA} = (\text{total of weighted grade values}) \div (\text{total of points})$$

### Example

The calculations for Units 1 and 2, assigned 6 and 12 points respectively, are shown below.

Unit 1: Grade Distinction, Grade value 3.0

Points 6, Weighted grade value 18.0

Unit 2: Grade Credit, Grade value 2.0

Points 12, Weighted grade value 24.0

Totals: Points 18, Weighted grade value 42.0

GPA: 2.3

### 50

For the example given, what is the GPA if Units 1 and 2 are assigned 9 points each (rather than 6 and 12)?

Round your answer to **one decimal place**.

### 51

For the example given, what is the GPA if

- the grade for Unit 1 is unchanged, and
- a High Distinction (rather than a Credit) is awarded for Unit 2?

Round your answer to **one decimal place**.

## Maya Timeline

This table shows the evolution of Maya culture.

The terms BCE and CE represent Before Common Era and Common Era respectively.

Name of period	Time
Early Pre-classic Maya	1800–900 BCE
Middle Pre-classic Maya	900–300 BCE
Late Pre-classic Maya	300 BCE–250 CE
Early Classic Maya	250–600 CE
Late Classic Maya	600–900 CE
Post Classic Maya	900–1500 CE
Colonial period	1500–1800 CE
Independent Mexico	1821 to present

Source: Canadian Museum of History

52

Below are some statements about the timeline.

Click on 'True' or 'False' for each statement.

Statement	True	False
The total length of the Pre-classic Maya period was more than 2000 years.	<input type="radio"/>	<input type="radio"/>
The Maya adopted an hierarchical society in the period 200 BCE to 100 BCE. This period lies within the Late Pre-classic Maya period.	<input type="radio"/>	<input type="radio"/>

**You have completed Section 1.**

**In the actual test, when you commence Section 2 you will not be able to return to Section 1.**

## Section 2: Calculator Not Available

### Healthy Canteens

The Healthy School Canteens strategy for one Australian state includes the following guidelines:

- At least  $\frac{3}{4}$  of the canteen menu should include Everyday\* foods and drinks.
- No more than  $\frac{1}{4}$  of the canteen menu should include Occasional\* foods and drinks.

\* Everyday foods generally have more nutritional value than Occasional foods and drinks.

**53**

The canteen of a school in the state has 60 items on the menu.

According to the guidelines, what should be the maximum number of Occasional foods and drinks on the canteen menu?

## Student Triathlon

This table shows the distances that competitors swim, cycle and run in an inter-school triathlon event.

swim	cycle	run
75 m	3 km	500 m

54

Below are some statements about the triathlon.

Click on 'True' or 'False' for each statement.

Statement	True	False
The swim distance is 0.75 kilometres.	T	F
The total length of the triathlon is 3575 metres.	T	F

55

This table shows the finishing times of the competitors who came first and second.

Place	Finishing time (min:sec)
First	32:55
Second	33:13

What is the difference between the finishing times of the two competitors?

--

 seconds

## Edith Cowan

Edith Cowan was the first Australian woman to serve as a member of parliament. She was born on 2 August 1861 and died on 9 June 1932.

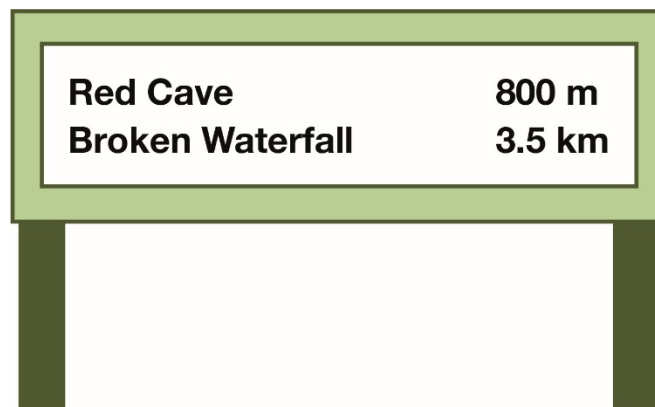
56

Complete the following statement correctly.

‘Edith Cowan was aged \_\_\_\_\_ when she died.’

## Walking Distance

This is a sign at a car park.



57

Red Cave and Broken Waterfall are on the same track.

What is the distance, in kilometres, from Red Cave to Broken Waterfall?

km

## Macadamia Nuts


Jenny is shopping online.

She orders 0.4 kg of macadamia nuts.

**Macadamia nuts**

**\$30.00 per kg**

qty  kg

Add to cart 

Proceed to checkout >

58

What is the cost of the macadamia nuts that Jenny buys?

\$

## Company Budget

A company has a three-year development budget as follows:

Year 1: \$600 million

Year 2: \$800 million

Year 3: \$1.2 billion

59

Below are some statements about the budget.

Click on 'True' or 'False' for each statement.

### Statement

### True False

The Year 2 amount is 125% of the Year 1 amount.

T F

The Year 3 amount is less than the total of the Year 1 and Year 2 amounts.

T F

## Gardening Club

A teacher coordinates a school gardening club.

The club meets twice a week at lunchtimes as follows:

Tuesdays 30 minutes

Thursdays 30 minutes

The teacher spends an additional 30 minutes each week preparing for the club.

**60**

Assuming public holidays do not fall on Tuesdays and Thursdays, what is the total number of hours the teacher devotes to the gardening club over a 10-week term?

Hours

## Stationery Order

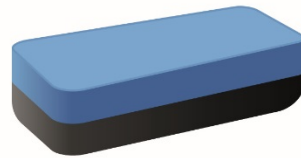
A teacher orders 1 laser pointer, 8 whiteboard markers, and 1 whiteboard eraser.



laser pointer  
\$68.95



whiteboard marker  
\$3.97



whiteboard eraser  
\$1.95

**61**

Which method would give the best estimate of the total cost?

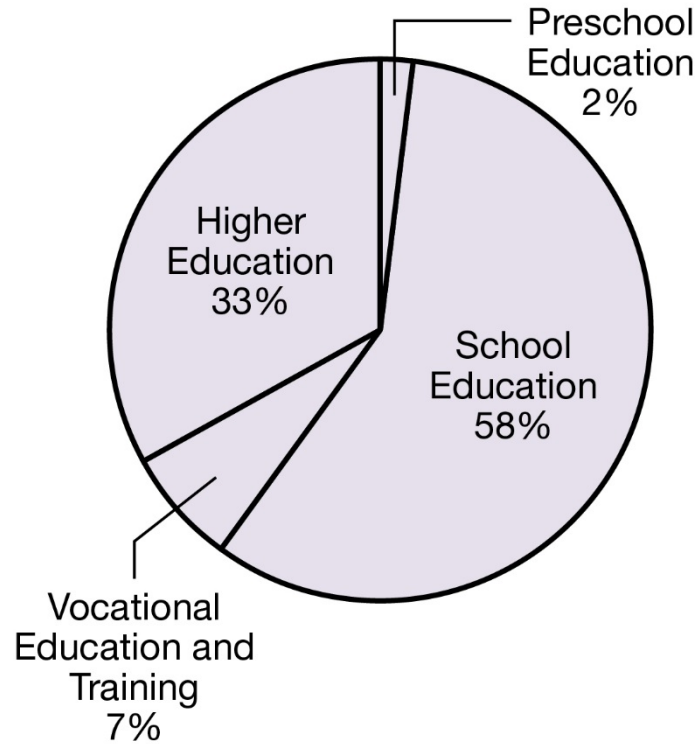
- A.  $60 + 3 \times 8 + 1$
- B.  $60 + 4 \times 8 + 2$
- C.  $70 + 3 \times 8 + 2$
- D.  $70 + 4 \times 8 + 2$



## Education Expenditure

The pie chart shows the percentage of the overall Australian government expenditure on education for each of the four sectors in 2015–16.

**Australian Government  
Expenditure on Education  
(2015–16)**



Based on Australian Bureau of Statistics data, 2016

62

Below are some statements about the chart.

Click on 'True' or 'False' for each statement.

Statement	True	False
The expenditure on Higher Education was more than four times the expenditure on Vocational Education and Training.	T	F
The ratio of the total expenditure on Preschool Education and School Education to the total expenditure on Higher Education and Vocational Education and Training was 3 to 2.	T	F

### Dance Instructor

A physical education teacher wants to hire a dance instructor to conduct some classes.

The dance instructor charges \$250 for each class.

However, when 3 classes are booked at the same time, a 20% discount off the total cost applies.

63

What is the cost of three classes when booked at the same time?

\$

### School Sector

In 2018, there were 3 893 834 students enrolled in 9477 schools in Australia.

Approximately two-thirds of the students were enrolled in Government schools.

64

Which of these values is closest to the number of children enrolled in Government schools in 2018 in Australia?

- A. 2 million
- B. 2.3 million
- C. 2.5 million
- D. 2.6 million

65

In 2018, there were approximately twice as many Government schools as non-Government schools in Australia.

Which value is closest to the number of **Government** schools in Australia in 2018?

- A. 3200
- B. 4700
- C. 6300
- D. 7100