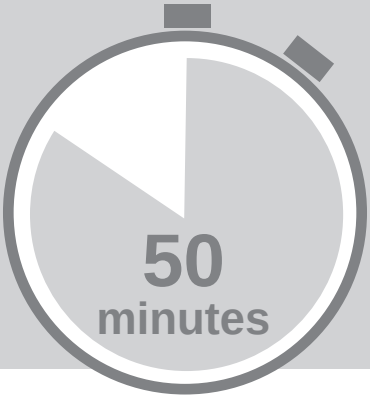
Government of **Western Australia**
School Curriculum and Standards Authority

STRONG
STUDENT
SAMPLE

Mathematics
Foundation course

Externally set task 2017



Before starting this task check that you have:

- black or blue pen, 2B pencils
- sharpener
- eraser
- highlighters
- correction fluid/tape
- a calculator of the type used in class assessments
- ruler
- one double-sided A4 page of notes if used in class assessments.

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Total time for the task: 50 minutes
Total marks: 24 marks
Weighting: 15% of the school mark

Question 1 **(7 marks)**

The Rottnest Channel Swim from Cottesloe Beach to Rottnest Island is approximately 19.6 km long.

(a) Joe experienced an injury a quarter of the way into the race and had to be rescued. **Estimate** how far he had swum before he had to be rescued. Give your answer to the nearest kilometre. (2 marks)

$19.6_{km} \div 4 = 4.9_{km} = 5_{km}$

Quarter $= \frac{1}{4}$

(b) After eight hours of swimming, Sam had completed 12.78 kilometres. Ben had completed 12.79 kilometres of the swim. What was the distance between them? (3 marks)

$12.78_{km} - 12.79_{km} = -0.01$

(c) Chloe has swum in the race seven times. What is the total distance she has swum? Show your workings, i.e. the steps you used to arrive at your answer. (2 marks)

$19.6_{km} \times 7 = 137.2_{km}$

See next page

Question 2 **(6 marks)**

Keith owns a farm in Western Australia. This season he has planted 25 hectares of wheat.

(a) One hectare of land on Keith's farm produces 1.57 tonnes of wheat. How much wheat does the farm produce in total in a season? (3 marks)

$25 \times 1.57 = 39.25$ tonnes

(b) Keith needs to take his wheat to the local grain silo for weighing. If Keith's truck can only carry six tonnes of wheat at a time, how many trips will he make to the silo? Show your workings, i.e. the steps you used to arrive at your answer. (3 marks)

$39.25 \div 6 = 6.54 = 7$ trips

See next page

Question 3 **(3 marks)**

A scale drawing of the front view of a house is shown below.

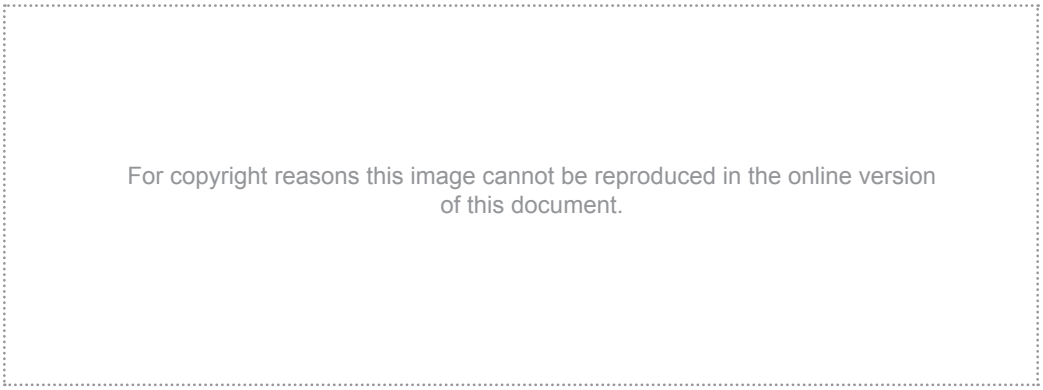
Scale 1:100

Front view

Calculate the actual height of the house in centimetres. Show your workings, i.e. the steps you used to arrive at your answer.

$6_{cm} \times 100 = 600_{cm}$

This is a seating plan of a theatre. Use the seating plan to answer the questions that follow on page 7.



See next page

Question 4 **(8 marks)**

(a) If you are sitting in seat P14, are you sitting in the Stalls, the Dress Circle or the Upper Circle? Stalls (1 mark)

(b) How many seats are there in row D of the upper circle? (1 mark)

40 seats

(c) How much will you pay for a ticket for seat D12 in the Dress Circle? (2 marks)

$101.85

(d) If you buy tickets for seats K10, K11 and K12, how much will you pay in total? Show your workings, i.e. the steps you used to arrive at your answer. $290.26 (4 marks)

K10 = $86.56

K11 = $101.85

K12 = $101.85

86.56
101.85
101.85
290.26

End of questions

ACKNOWLEDGEMENTS

Question 4 *His Majesty's Theatre seating plan* [Image]. (n.d.). Retrieved May, 2016, from http://waballet.com.au/payment/images/seatingplan_hismajestys.gif

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