

*Thank you to **Chris Harbeck, Stanley Knowles School**, for his permission to use one of his sample tests. He is attempting to have his students practice using a scoring guide. This will certainly help to eliminate any anxious moments during the examination period.*

## MATH TEST

Choose only **two** of the first four questions. Answer them to the best of your ability. Use the Scoring Guide to help you decide which questions to do. **You must answer question 5**

1. Five students wrote a Math test. The mean of the marks was 68. If four students had marks of 75, 62, 53, and 84, what was the mark of the fifth student? Explain why your answer looks right.

### Scoring Guide

You Did	You used a diagram to show	Understand the formula to	Find the total for the first	Finds the missing test score	Explains why the answer
Marks					

2. Cory answered 28 questions correctly on a test. He received 70%. How many questions were on the test? Explain in words why your answer looks right.

### Scoring Guide

You Did	Uses a diagram to solve the	Understands percent	Calculates the correct	Understands percent	Explains why the answer
Marks					

3. Find the mean, median, mode and range of the following group of scores:

70, 80, 90, 80, 70, 90, 75, 95, 100, 90

mean \_\_\_\_\_

median \_\_\_\_\_

mode \_\_\_\_\_

range \_\_\_\_\_

Scoring Guide

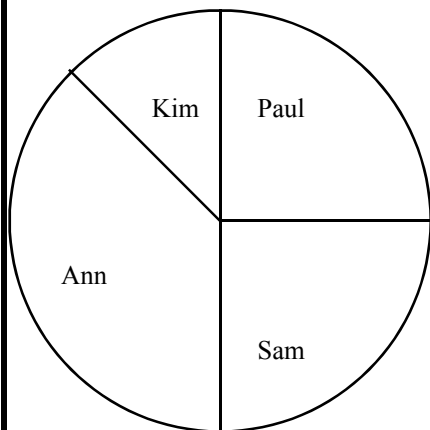
You Did	Uses a formula to calculate the average. 2	Orders the numbers and finds the range. 2	Understands Finding the median. 3	Calculates the mode. 1	Uses a clear method to answer the question. 1
Your Mark					

4. There were four candidates for class president.

a) If 36 students voted, how many voted for each candidate?

Ann \_\_\_\_\_ Kim \_\_\_\_\_ Sam \_\_\_\_\_ Paul \_\_\_\_\_

b) Explain why your answer looks correct.



Scoring Guide

Your Mark	Uses a table or formula to solve the question. 2	Chooses an appropriate number of voters for Sam and Paul. 2	Chooses an appropriate number of voters for Ann and Kim. 2	Explains why Sam and Paul is correct. 2	Explains why Ann and Kim are correct. 2
You did					

Answer the following box and whisker plot question. Do not forget to use the scoring guide at the bottom.

A class measured their students' heights in centimeters. Find the Lower Extreme, Upper Extreme, Median, Lower Quartile, and Upper Quartile. Put this information on a Box and whisker plot.

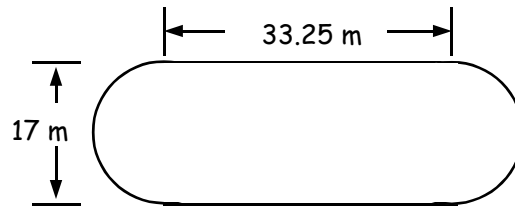
192, 164, 178, 172, 159, 167, 168, 175, 164, 154, 178, 165, 180



Scoring Guide					
<b>You Did</b>	Calculated the 5 key values. 2.5	Creates a number line with appropriate intervals. 3	Draws the Box and Whisker plot. 2.5	Orders Numbers 1	Finds the range 1
<b>Your Mark</b>					

## Sample question from 2004 examination

16. The diagram below represents a playground area. It is made from a rectangle with two semi-circles on the ends.



The playground needs to be completely covered in green-turf. The turf is available in three different rolls. **Which roll should I buy** to make sure that I have enough turf to cover the entire area with the **least** amount left over?



Roll A  
 $750 \text{ m}^2$



Roll B  
 $775 \text{ m}^2$



Roll C  
 $800 \text{ m}^2$

Show all of your work:

$2\frac{1}{2}$  Marks

My Answer: I chose Roll \_\_\_\_\_ because...

$1\frac{1}{2}$  Marks

### SCORING GUIDE

MARKS	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	
DID YOU:	Begin with an appropriate strategy?		Calculate following a clear accurate process?		Calculate correct area?	Choose the correct roll?	Explain your choice of rolls?		Possible 4 marks