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Term 1

February

2016

Stage 6 - Year 12

Maths General Task 2

Task 2 - 25%

General Instructions

- Time allowed: 45 minutes
- Write using a blue or black pen
- Board approved calculators can be used
- In all questions show relevant mathematical reasoning and/or calculations

Total Marks - 30

Section I

10 marks

Attempt questions 1 - 10

Allow about 10 minutes for this section

1 Simplify $(3b^4)^2$

(A) $9b^{16}$

(B) $6b^8$

(C) $9b^6$

(D) $9b^8$

2 Solve the equation:

$$\frac{5w - 3}{6} = 8$$

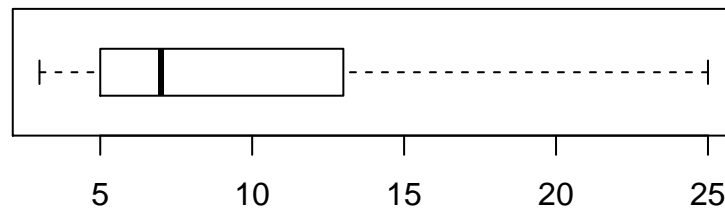
(A) $w = 13.6$

(B) $w = 10.8$

(C) $w = 10.2$

(D) $w = 9.8$

3 What best describes the shape of the following data set:



(A) Bi-modal

(B) Symmetrical

(C) Positively Skewed

(D) Negatively Skewed

4 Solve the equation:

$$\frac{5w - 3}{6} = 8$$

(A) $w = 13.6$

(B) $w = 10.8$

(C) $w = 10.2$

(D) $w = 9.8$

Section II

20 marks
Attempt Questions 11 - 12
Allow about 35 minutes for this section

Answer each the questions in the spaces provided
Your responses should include relevant mathematical reasoning and/or calculations.
Extra writing space has been provided on pages 11 and 12. If you use this space, clearly indicate which question you are answering.

Question 11 (10 marks)

(a) Expand $2y(5y^2 - y^3)$ 1

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(b) Solve these equations to find the values of x and y 3

$$\begin{cases} 2x + y = 5 \\ 2x - y = 9 \end{cases}$$

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Solutions

Section I - Multiple Choice

Question	Answer
1	D
2	C
3	C
4	A-
5	A-
6	A-
7	A-
8	A-
9	A-
10	A-

Section II - Written response

Some answers