IMPORTANT:
This resource was developed to support a previous version of the syllabus.
It may contain content that differs from the current syllabus.

HSC Marking Feedback 2017

Mathematics General 2

Written Examination

Question 26

General Feedback

Students should:

- understand the term 'part thereof' and 'for each call' (part (b))
- capture/recapture using a proportion statement rather than a memorised formula (part (c))
- learn to read and interpret an area chart (part (f)).

Student Strengths

In better responses, students were able to:

- calculate the costs involved using electricity (part (a))
- use right angled trigonometry to calculate a side (part (d))
- calculate share cost, brokerage, selling price and dividend (part (e)).

Question 27

General Feedback

Students should:

- use the statistics function on a calculator to find the standard deviation (part (a) (ii))
- convert between units – megabytes and terabytes (part (b))
- calculate from a given table the future value of an annuity and the total interest earned as opposed to the interest earned per annum (part (c)).

Student Strengths

In better responses, students were able to:

- calculate the mean of a data set (part (a))
- calculate the longitude of a place from a diagram (part (d) (i))
- show a conversion from degrees in longitude to hours (part (d) (ii)).

Question 28

General Feedback

Students should:

- solve simultaneous equations and explain the context of the solution (parts (a) (ii) and (iii))
- be competent with $P + I - R$ using more than one application (part (c))
- change the subject of a formula involving the inverse of a square root (part (d)).

Student Strengths

In better responses, students were able to:

- write down sample spaces (part (b))
- read and interpret a graph (part (e))
- calculate the profit earned after costs are calculated and subtracted (part (e)).

Question 29

General Feedback

Students should:

- verify a given solution by showing calculations on how the result was obtained (part (a))
- convert km^2 to m^2 (part (b))
- recognise when data does not fit a normal distribution /bell curve (part (d) (ii) and (iii)).

Student Strengths

In better responses, students were able to:

- calculate probability using a two-way table and finding two relevant probabilities and comparing them (part (c))
- calculate the Medicare levy, and taxable income from a given table (part (b))
- find the median from a dot plot (part (d)).

Question 30

General Feedback

Students should:

- understand the difference between the range and IQR for a data set (part (a))
- realise variation is not always linear (part (b))
- understand a bearing as opposed to an angle (part (c)).

Student Strengths

In better responses, students were able to:

- find the IQR (part (a))
- apply the cosine rule to find the side length of a triangle and sine rule for an angle (part (c))
- substitute into a given formula (part (d)) and selecting the appropriate formula from the reference sheet provided to calculating the volume of a cone and area of a circle (part (e)).