

# Guide to making judgments — Year 9 Mathematics

Name .....

**Focus:** Apply mathematical reasoning to analyse mobile phone trends, features, uses and payment plans, and to justify financial advice.

Knowledge and understanding	Thinking and reasoning Reflecting	Communicating	
<p>Displays and analyses data to make inferences about trends in mobile phone use.</p> <p>Performs calculations involving time zones, digital data and percentage.</p> <p>Questions 1–5, 7, 8</p>	<p>Solves problems involving time, area, ratio, rate, proportion and units of measurement.</p> <p>Calculates mobile phone use costs and chooses strategies to provide financially sound advice.</p> <p>Reflects on learning to justify reasoning.</p> <p>Questions 6, 9–14</p>	<p>Uses mathematical language and representations when communicating thinking and justifying reasoning.</p> <p>Questions 1–14</p>	
<p>Provides clear, justified analysis of trends. Consistently successful with calculations involving time zones, digital data and percentage.</p>	<p>Correctly applies understandings to explain why a photo is clear. Provides detailed, fully justified financial advice, based on a consideration of all relevant information.</p>	<p>Clearly and logically communicates procedures, reasoning and justification using mathematical representations and language, including units and appropriate rounding.</p>	A
	<p>Correctly converts between time zones involving daylight saving, explains why a photo is pixelated and determines the number of emails sent for the cost of a text message.</p>		B
<p>Correctly plots data, includes an appropriate title and key and makes valid predictions. Demonstrates some success in analysing trends in mobile phone ownership and moderate success in calculations involving digital data and percentage. Makes significant progress with time zone calculations.</p>	<p>Makes significant progress in most of the following problems, leading to some solutions: explains why a photo is pixelated, determines Aaron’s average daily social networking allowance and Joe’s prepaid recharge period. Provides financial advice based on a consideration of some relevant information.</p>	<p>Shows working and units in most calculations. Makes some use of mathematical language in explanations.</p>	C
	<p>Makes progress in some of the following: explains why a photo is pixelated, determines Aaron’s average daily social networking allowance and Joe’s prepaid recharge period, provides financial advice.</p>		D
<p>Demonstrates some success in displaying or analysing data, or in calculations involving digital data and percentage.</p>		<p>Shows some working.</p>	E

Feedback .....

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