11-12

Mobile Phone Rates	
Problem wording	Jorge and Rosa have different mobile phone rates.
	• Jorge pays 10 cents per minute for every call he makes.
	• Rosa pays 60 cents per month plus 5 cents per minute for every call she makes.
	The rate is the same no matter the time of day or day of the week.
	Discuss the advantages and disadvantages of each rate.
Purpose	<ul> <li>To establish the relationship between the independent and dependent variables.</li> <li>To represent information using a table and to explore the numerical relationships deduced from it.</li> <li>To use algebraic notation (letters) to represent indeterminate quantities.</li> <li>The compare the behaviour of two linear functions.</li> </ul>
Suggestions for classroom delivery	Students should be allowed sufficient time to understand the problem involved in the task and absorb all the numerical information required to answer the questions.
	Teachers should encourage students to represent the data on tables and Cartesian coordinate systems to compare which rate is more advantageous, depending on use in minutes.
	Students should also be provided sufficient space to explain how they found their answers. Teachers should look at more than just the numerical answer to each question when assessing students' grasp of the concepts involved.