

Amusement Park II	
Problem wording	<p>Pulianas now has an amusement park. To get in you have to buy a pass which you can use as often as you like. The pass costs 3 euros.</p> <p>The park has lots of rides. All rides cost 1 euro.</p> <p>Identification of specific cases, recognition of structure and formulation of a conjecture</p> <p>The teacher should introduce the task to the class as a whole and ask the students to solve for specific cases or examples to ensure they understand.</p> <p>a) How much would the pass and three rides cost? b) How much would the pass and 12 rides cost? c) How much would the pass and eight rides cost?</p> <p>Additional questions</p> <p>d) How much would the pass and 15 rides cost? e) How much would the pass and four rides cost? f) How much would the pass and 45 rides cost?</p> <p>Validating a conjecture</p> <p>Then they should be asked to answer the following questions, individually or in small groups.</p> <p>1. How much would the pass and one ride cost? Explain how you found the answer. 2. How much would the pass and 17 rides cost? Explain how you found the answer. 3. How much would the pass and 9 rides cost? Explain how you found the answer. 4. How much would the pass and 300 rides cost? Explain how you found the answer. 5. How much would the pass and one million rides cost? Explain how you found the answer.</p> <p>Generalising a conjecture</p> <p>6. Encarna bought a pass and rode on a lot of rides. Explain how to figure out how much she spent. 7. Encarna bought a pass and rode on  rides. Explain how to figure out how much she spent.</p> <p>Exploring the inverse relationship</p> <p>8. If you have 17 euros, how can you figure out how many rides you can take in the park?</p>

	<p>9. If you have 9 euros, how can you figure out how many rides you can take in the park?</p> <p>10. If you have 29 euros, how can you figure out how many rides you can take in the park?</p> <p>11. Explain to Encarna how she can figure out how many rides she can take with the money she has.</p> <p>12. If you have Q euros, how can you figure out how many rides you can take in the park?</p>
Purpose	<ul style="list-style-type: none"> • To apply a rule governing the function to specific numerical cases. • To generalise the functional relationship. • To generalise the functional relationship in cases involving an indeterminate quantity.
Suggestions for classroom delivery	<p>Where necessary with the first few questions, the teacher can use tickets and coins as teaching aids.</p>