

11. Mixed Application — Worksheet C

Name: _____ **Class:** _____ **Date:** _____

Before solving, identify the input, output, units, and constant.

1. Notebooks cost \$3 each. Make a table for 0 through 4 notebooks.

2. Write the equation for Question 1.

3. A taxi charges \$5 to start and \$2 per kilometre. Make a table for 0 through 4 km.

4. Is the taxi relationship proportional? Explain.

5. A cyclist travels 45 km/h. Write the equation and find the distance after 6.5 hours.

6. The table shows Find k and the equation.

7. Is proportional?

8. Create a real-world proportional relationship and represent it with a table and equation.

9. Describe the graph of a non-proportional relationship with a starting fee.

10. Explain how the table, graph, and equation for one relationship should agree.

11. **What matters and what doesn't:** A bike shop tracks sales over 3 months and has 5 employees. Each bike costs \$250. Write the equation for cost C and number of bikes n , then find the cost of 6 bikes. Which details in this problem were not needed to answer it?

12. **Reconstruct the situation:** The equation represents a real proportional relationship. Write a context for it, and explain what the 12 represents and why the relationship passes through the origin.
