

9. Guided Practice — Worksheet A

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

Show a representation whenever the question asks for one. Use units in your answers.

Part A: Notice the relationship

1. Complete the table for a relationship that costs \$4 per item.

Items	0	1	2	5	8
Cost	___	___	___	___	___

2. What is the constant of proportionality in Question 1? Include units.

3. Write an equation for Question 1. Let n be the number of items and C be the cost.

4. Explain what the point $(1, 4)$ means in this situation.

5. Explain what the point (0, 0) means in this situation.

Part B: Proportional or not?

6. Is the relationship proportional? Explain using the quotient.

x	1	2	3	4
y	5	10	15	20

7. Is the relationship proportional? Explain using the difference and the quotient.

x	1	2	3	4
y	6	8	10	12

8. A taxi charges \$4 to start and \$2 per kilometre. Is cost proportional to distance? Explain using the zero case.

Part C: Scale and interpret

9. Five notebooks cost \$15. What is the cost per notebook?

10. At the same rate, what do 8 notebooks cost?

11. A car travels 180 km in 3 hours. Find its speed in kilometres per hour.

12. At that speed, how far will it travel in 5 hours?

13. Create one proportional table with at least four rows. Label the quantities and include zero.

14. Write one sentence explaining the difference between an additive pattern and a proportional relationship.
