Lesson 11: Develop Rules for Multiplying Signed Numbers

Problem Set

1. Complete the problems below. Then, answer the question that follows.

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Which row shows the same pattern as the outlined column? Are the problems similar or different? Explain.

1. Explain why . Use patterns, an example from the Integer Game, or the properties of operations to support your reasoning.
2. Each time that Samantha rides the commuter train, she spends for her fare. Write an integer that represents the change in Samantha’s money from riding the commuter train to and from work for days. Explain your reasoning.
3. Write a real-world problem that can be modeled by

**Challenge:**

1. Use properties to explain why for each integer , . (Hint: What does equal? What is the additive inverse of ?)