

Proportional Reasoning in Context

Grades 6-8 Name: _____ Date: _____

Context and evidence

A school printer produces 45 booklets in 3 minutes, 90 in 6 minutes and 150 in 10 minutes.

Your investigation

1. Calculate the unit rate for each row.

2. Decide whether the relationship is proportional and cite two pieces of evidence.

3. Complete: 12 minutes = ____ booklets; 240 booklets = ____ minutes.

4. Plot the three points and draw the line predicted by the relationship.

5. A technician claims 500 booklets take exactly 30 minutes. Test the claim and state one real-world limitation.

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Learning goals

Reason accurately, use evidence, show a method and communicate a defensible conclusion.

Response guidance

Students should identify 15 booklets per minute, use a constant ratio and recognise that setup, paper supply or machine limits may affect a real result.

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4. Plot the three points and draw the line predicted by the relationship.
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Extension and assessment

Ask learners to compare methods, revise one response after feedback and identify the evidence that most changed their thinking.