

Grade 7 Mathematics Sample SR Item

MAT.07.SR.1.0000G.E.161

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| Sample Item ID: | MAT.07.SR.1.0000G.E.161 |
| Grade: | 07 |
| Claim(s): | Claim 1: Concepts and Procedures Students can explain and apply mathematical concepts and carry out mathematical procedures with precision and fluency. |
| Assessment Target(s): | 1 E: Draw, construct, and describe geometrical figures and describe the relationships between them. |
| Content Domain: | Geometry |
| Standard(s): | 7.G.1, 7.RP.2 |
| Mathematical Practice(s): | 1, 5 |
| DOK: | 2 |
| Item Type: | SR |
| Score Points: | 1 |
| Difficulty: | M |
| Key: | B |
| Stimulus/Source: | |
| Target-Specific Attributes (e.g., accessibility issues): | |
| Notes: | |

A company designed two rectangular maps of the same region. These maps are described below.

Map 1: The dimensions are 8 inches by 10 inches.
The scale is $\frac{3}{4}$ mile to 1 inch.

Map 2: The dimensions are 4 inches by 5 inches.

Which ratio represents the scale on Map 2?

- (A) $\frac{1}{2}$ mile to $\frac{3}{4}$ inch
- (B) $\frac{3}{4}$ mile to $\frac{1}{2}$ inch
- (C) $\frac{1}{4}$ mile to 1 inch
- (D) $\frac{3}{8}$ mile to 1 inch

Key and Distractor Analysis:

- A Found correct relationship but reversed order
- B Correct
- C Subtracted the first term of ratio by scale factor
- D Multiplied the first term of ratio by scale factor