

MAT.07.SR.1.000RP.A.291

Sample Item ID:	MAT.07.SR.1.000RP.A.291
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 A: Analyze proportional relationships and use them to solve real-world and mathematical problems.
Content Domain:	Ratios and Proportional relationships
Standard(s):	7.RP.2
Mathematical Practice(s):	1, 4
DOK:	2
Item Type:	SR
Score Points:	1
Difficulty:	L
Key:	B
Stimulus/Source:	
Target-Specific Attributes (e.g., accessibility issues):	
Notes:	

Roberto is making cakes. The number of cups of flour he uses is proportional to the number of cakes he makes.

Roberto uses $22\frac{1}{2}$ cups of flour to make 10 cakes.

Which equation represents the relationship between f , the number of cups of flour Roberto uses, and c , the number of cakes he makes?

(A) $f = \frac{4}{9}c$

(B) $f = 2\frac{1}{4}c$

(C) $f = 2\frac{1}{2}c$

(D) $f = 10c$

Key and Distractor Analysis:

- A. inverts the ratio
- B. Key
- C. student thinks $22\frac{1}{2} \div 10 = 2\frac{1}{2}$
- D. uses 10 as the coefficient