

SBAC Block Mirror: Math Grade 4 Number and Operations - Fractions (AE130885)

Item Number	Item ID	Item Type	Standard Abbreviation	Standard Text	Cluster	Claim	Target(s)	Correct Answer	DOK
1	E257944	Technology Enhanced - Math Formula	MA.4.NF.B.3.a	Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.	MA.4.NF.B	1	G	autoscore	1
2	E254195	Technology Enhanced - Cloze Association	MA.4.NF.A.2	Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	MA.4.NF.A	1	F	autoscore	2
3	E257420	Technology Enhanced - Cloze Association	MA.4.NF.B.3.b	Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model.	MA.4.NF.B	3	D, F	autoscore	2
4	E252499	Multiple Choice	MA.4.NF.A.1	Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{n \times a}{n \times b}$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	MA.4.NF.A	1	F	C	2
5	E229355	Technology Enhanced - Math Formula	MA.4.NF.B.3.c	Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.	MA.4.NF.B	1	G	autoscore	2
6	E261381	Technology Enhanced - Cloze Association	MA.4.NF.A.1	Explain why a fraction $\frac{a}{b}$ is equivalent to a fraction $\frac{n \times a}{n \times b}$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	MA.4.NF.A	1	F	autoscore	2
7	E257943	Technology Enhanced - Math Formula	MA.4.NF.B.4.b	Understand a multiple of $\frac{a}{b}$ as a multiple of $\frac{1}{b}$, and use this understanding to multiply a fraction by a whole number.	MA.4.NF.B	1	G	autoscore	2
8	E259978	Multiple Correct Answer	MA.4.NF.C.7	Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model.	MA.4.NF.C	3	F, C	B, D	2
9	E257397	Technology Enhanced - Number Line	MA.4.NF.B.4	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.	MA.4.NF.B	2	B, D	autoscore	2
10	E194321	Technology Enhanced - Classification	MA.4.NF.A.2	Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	MA.4.NF.A	1	F	autoscore	2
11	E209458	Technology Enhanced - Math Formula	MA.4.NF.B.3.d	Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.	MA.4.NF.B	1	G	autoscore	2
12	E242857	Multiple Choice	MA.4.NF.A.2	Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	MA.4.NF.A	1	F	B	2
13	E257942	Technology Enhanced - Cloze Association	MA.4.NF.C.5	Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.	MA.4.NF.C	1	H	autoscore	2
14	E236771	Technology Enhanced - Math Formula	MA.4.NF.B.4.c	Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.	MA.4.NF.B	1	G	autoscore	2
15	E215123	Technology Enhanced - Number Line	MA.4.NF.C.6	Use decimal notation for fractions with denominators 10 or 100.	MA.4.NF.C	1	H	autoscore	2

Totals	Claim 1	12
(SBAC bp)	Target F	5
	Target G	5
	Target H	2
	Claim 2	1
	Claim 3	2
	Claim 4	0

