

# Item Analysis



The Item Analysis displays for each question the percentage of students who answered Correct (including Self-corrected), Incorrect, or Did Not Answer. For the Interview questions, the report also displays the appropriate and inappropriate strategies used by students who answered the question correctly.























*Look in this column to see the strategies used by students who gave correct answers.*

**Item Analysis: Whole Numbers**

**MELODY TEST CLASS**  
 Start Date: 01-Sep-2011  
 End Date: 23-Jan-2012

**Interview**  
 Students: 8

**Legend**  
 Appropriate for the numbers at hand  
 Not appropriate for the numbers at hand

Question	Correct / Self-corrected	Incorrect	Did Not Answer	Strategies Used by Students Who Gave Correct Answers
1 1000 - 998	62%	38%	0%	 Uses addition to solve subtraction problems (5/5)
2 99 + 17	100%	0%	0%	 Breaks numbers apart to add or subtract (5/8)  Uses standard algorithm to add or subtract (2/6)  Counts by 1s (1/8)
3 100 - 18	88%	12%	0%	 Uses standard algorithm to add or subtract (3/7)  Breaks numbers apart to add or subtract (1/7)  Uses benchmark numbers to add or subtract (1/7)  Uses addition to solve subtraction problems (1/7)  Gives other reasonable explanation (1/7)
4 15 + ___ = 200	88%	12%	0%	 Uses benchmark numbers to add or subtract (4/7)  Uses standard algorithm to add or subtract (3/7)
5 20 x 15 = 300, 21 x 15 = ___	62%	38%	0%	 Applies understanding (4/5)
6 60 x 40	88%	12%	0%	 Uses known facts and place value to multiply or divide (5/7)  Uses standard algorithm to multiply or divide (2/7)
7 15 x 12	50%	50%	0%	 Breaks numbers apart to multiply or divide (2/4)  Uses standard algorithm to multiply or divide (2/4)
8 7000 ÷ 70	75%	25%	0%	 Uses known facts and place value to multiply or divide (4/5)  Uses standard algorithm to multiply or divide (2/6)
9 Estimate 18 x 21	88%	12%	0%	 Uses benchmark numbers to make estimates (4/7)  Guesses, does not explain, or gives faulty explanation (2/7)  Figures exact answer when asked to estimate (1/7)
10 295 students, 25 on each bus	62%	38%	0%	 Applies understanding (4/5)

**Written Computation**  
 Students: 7

Question	Correct / Self-corrected	Incorrect	Did Not Answer
1 5000 - 328	100%	0%	0%
2 842 x 35	100%	0%	0%
3 3423 ÷ 6	14%	86%	0%
4 275 + 22	100%	0%	0%

*Five of the seven students who answered  $60 \times 40$  correctly used this strategy.*

*Two of the six students who answered  $7000 \div 70$  correctly used the standard algorithm, a strategy that is not appropriate for the numbers at hand.*