

Task Model 1 Response Type: Equation/Numeric DOK Level 1 6.NS.B.2 Fluently divide multi-digit numbers using the standard algorithm. Evidence Required: 1. The student divides multi-digit numbers. Tools: None	Prompt Features: The student is prompted to find the quotient of multi-digit numbers with or without a remainder. Stimulus Guidelines: • The expression should be in the form $x \div y$, where x is a 4–6-digit positive integer and y is a 2–5-digit positive integer. Exception: do not have x as a 4-digit number and y as a 2-digit number without a remainder. • Generally answers with remainders should terminate no greater than the hundredths place. • Item difficulty can be adjusted via these example methods: ○ Students find quotient with no remainder (4-digit divided by 3-digit). ○ Students find quotient with no remainder (5- or 6-digit divided by 2- or 3-digit). ○ Students find quotient with a remainder (4- or 5-digit divided by 2- or 3-digit). ○ Students find quotient with a remainder or students interpret a division algorithm (4-digit divided by 4-digit; 6-digit divided by 2- or 3-digit). ○ Students find quotient with a remainder (5-digit divided by 4- or 5-digit; 6-digit divided by 4-, 5-, or 6-digit). TM1 Stimulus: The student is presented with a division expression. Example Stem 1: Divide. $16,536 \div 24$ Enter the exact quotient. Example Stem 2: Divide. $35,702 \div 25$ Enter the exact quotient. Rubric: (1 point) Student enters the correct quotient (e.g., 689; 1428.08). Response Type: Equation/Numeric
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Task Model 2 Response Type: Equation/Numeric DOK Level 1 6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. Evidence Required: 2. The student adds, subtracts, multiplies, and divides multi-digit decimals. Tools: None	Prompt Features: The student is prompted to find the sum, difference, product, or quotient of multi-digit numbers with or without a remainder using the standard algorithm. Stimulus Guidelines: - Given numbers and answers should be positive. - Item difficulty can be adjusted via these example methods: - Students add two multi-digit decimals; at least one decimal in thousandths. - Students add two multi-digit decimals, at least one decimal in ten-thousandths OR add three multi-digit decimals, at least one decimal in thousandths or ten-thousandths. - Students subtract two multi-digit decimals, at least one decimal in thousandths or ten thousandths. - Students multiply two multi-digit decimals, at least one decimal in thousandths. - Students find quotient of multi-digit decimals, at least one decimal to thousandths OR product of two multi-digit decimals, at least one decimal in ten-thousandths. TM2a Stimulus: The student is presented with an addition expression with two or three terms. Example Stem: Add. $34.381 + 8.2$ Enter the exact sum. Rubric: (1 point) Student enters the correct sum (e.g., 42.581). Response Type: Equation/Numeric TM2b Stimulus: The student is presented with a subtraction expression with two terms. Example Stem: Subtract. $48.235 - 29.67$ Enter the exact difference. Rubric: (1 point) Student enters the correct difference (e.g., 18.565). Response Type: Equation/Numeric
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Task Model 2 Response Type: Equation/Numeric DOK Level 1 6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. Evidence Required: 2. The student adds, subtracts, multiplies, and divides multi-digit decimals. Tools: None	TM2c Stimulus: The student is presented with a multiplication expression with two decimals. Example Stem: Multiply. $8.296 \bullet 0.8$ Enter the exact product. Rubric: (1 point) Student enters the correct product (e.g., 6.6368). Response Type: Equation/Numeric TM2d Stimulus: The student is presented with a division expression with two decimals. - The divisor place value should be to the tenths or hundredths and the dividend place value should be at the thousandths or the ten-thousandths. - Answers should be a positive answer that terminates no greater than the thousandths place. Example Stem: Divide. $0.912 \div 0.24$ Enter the exact quotient. Rubric: (1 point) Student enters the correct quotient (e.g., 3.8). Response Type: Equation/Numeric
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Task Model 2 Response Type: Equation/Numeric DOK Level 2 6.NS.B.3 Fluently add, subtract, multiply, and divide multi-digit decimals using the standard algorithm for each operation. Evidence Required: 2. The student adds, subtracts, multiplies, and divides multi-digit decimals. Tools: None	Prompt Features: The student is prompted to reason and interpret about addition, subtraction, multiplication, or division problems. Stimulus Guidelines: Given numbers and answers should be positive and item difficulty can be adjusted by changing whether the given equation is addition, subtraction, multiplication, or division. TM2e Stimulus: The student is presented with an addition/subtraction/multiplication/division equation. Example Stem: Use the fact that $12 \bullet 218 = 2616$. Enter the exact product of $1.2 \bullet 2.18$. Rubric: (1 point) Student enters the correct product (e.g., 2.616). Note: Students should be able to determine the product without calculating it, but instead by using the given computation and reasoning skills. Response Type: Equation/Numeric
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Task Model 3 Response Type: Equation/Numeric DOK Level 1 6.NS.B.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$.</i> Evidence Required: 3. The student determines the greatest common factor of two whole numbers. Tools: None	Prompt Features: The student is prompted to find the greatest common factor of two whole numbers. Stimulus Guidelines: • Greatest common factor should be greater than 1. • Whole numbers should be less than or equal to 100. • Item difficulty can be adjusted via these example methods: ○ Students find GCF of two whole numbers (both numbers are even; GCF less than 10). ○ Students find GCF of two whole numbers (GCF between 10 and 20). ○ Students find GCF of two whole numbers (one of the numbers is a multiple of 5, the other is a multiple of 10). ○ Students find GCF of two whole numbers (one of the numbers is a prime number greater than 20 and is a factor of the other number). TM3 Stimulus: The student is presented with two whole numbers less than 100. Example Stem: Enter the greatest common factor of 24 and 36. Rubric: (1 point) Student enters the correct greatest common factor (e.g., 12). Response Type: Equation/Numeric
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Task Model 4 Response Type: Equation/Numeric DOK Level 1 6.NS.B.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$.</i> Evidence Required: 4. The student determines the least common multiple of two whole numbers. Tools: None	Prompt Features: The student is prompted to find the least common multiple of two whole numbers. Stimulus Guidelines: • Whole numbers should be less than or equal to 12. • Item difficulty can be adjusted via these example methods: ○ Students find LCM of two whole numbers (one of the numbers is 2). ○ Students find LCM of two whole numbers (one of the numbers is 5; both numbers lower than 6; LCM is less than 30). ○ Students find LCM of two whole numbers (one of the numbers is less than 6, the other number is greater than 6; LCM is less than 40). ○ Students find LCM of two whole numbers (LCM is greater than 40). TM4 Stimulus: The student is presented with two whole numbers less than 12. Example Stem: Enter the least common multiple of 6 and 8. Rubric: (1 point) Student enters the correct least common multiple (e.g., 24). Response Type: Equation/Numeric
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Task Model 5 Response Type: Equation/Numeric DOK Level 2 6.NS.B.4 Find the greatest common factor of two whole numbers less than or equal to 100 and the least common multiple of two whole numbers less than or equal to 12. Use the distributive property to express a sum of two whole numbers 1–100 with a common factor as a multiple of a sum of two whole numbers with no common factor. <i>For example, express $36 + 8$ as $4(9 + 2)$.</i> Evidence Required: 5. The student uses the distributive property to express a sum of two whole numbers with a common factor as a multiple of a sum of two whole numbers with no common factor. Tools: None	Prompt Features: The student is prompted to identify equivalent expressions using the distributive property. Stimulus Guidelines: • The expression should be in the form $x + y = a(b + c)$ or $a(b + c) = x + y$ where x, y, a, b, and c are whole numbers between 1 and 100. • x and y should have a common factor greater than 1. • The missing number may be any of the variables x, y, a, b, and c. • Item difficulty can be adjusted via these example methods: ○ Use only even numbers less than 20. ○ Use only numbers less than 70. ○ Use at least two numbers greater than 70. TM5 Stimulus: The student is presented with an equation showing the distributive property with a missing number. Example Stem: Consider the equation. $24 + 30 = 6(4 + \square)$ Enter the unknown number that makes the equation true. Rubric: (1 point) Student enters the correct value (e.g., 5). Response Type: Equation/Numeric
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