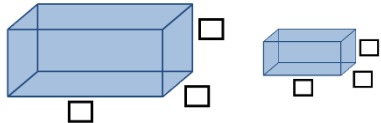


# Depth of Knowledge Matrix – 5th Grade Math

Topic	Evaluating Expressions	Rounding Decimals	Multi-Digit Multiplication	Multiplying Decimals
CCSS Stand.	• 5.OA.1	• 5.NBT.4	• 5.NBT.5	• 5.NBT.7
DOK 1 Example	Evaluate the expression.  $56 \div (8 - 1)$	Round the decimal to the nearest tenth.  7.163	Find the product.  $37 \times 45$	Solve.  $3.4 \times 2.5 =$
DOK 2 Example	Using the digits 0 through 9, at most one time each, place a digit in each box to create two true statements: one where the value on each side of the equal sign is greater than 30 and one where it's less than 30.  $\square\square \div (\square - \square) = \square + \square \times \square$	Using the digits 0 to 9 at most one time each, place a digit in each box to create two different decimals that are equivalent when rounded to the nearest tenth.  $\square.\square\square\square$ $\square.\square\square\square$	Using the digits 0 to 9 at most one time each, place a digit in each box to create a true equation.  $\square\square \times \square\square = \square\square\square$	Using the digits 1 to 9 at most one time each, fill in the boxes to make a true number sentence.  $\square.\square \times 3.2 = \square.\square$
DOK 3 Example	Using the digits 0 through 9, at most one time each, place a digit in each box to create two true statements: one where the value on each side of the equal sign is greater than 30 and one where it's less  $\square\square \div (\square - \square) = \square + \square \times \square$	Using the digits 0 to 9 at most one time each, place a digit in each box to create two different decimals that are equivalent when rounded to the nearest tenth and have the least possible value.  $\square.\square\square\square$ $\square.\square\square\square$	Using the digits 0 to 9 at most one time each, place a digit in each box to create a true equation with the greatest possible product.  $\square\square \times \square\square = \square\square\square$	Using the digits 1 to 9 at most one time each, fill in the boxes so that the product is as close to 50 as possible.  $\square.\square \times \square.\square =$

# Depth of Knowledge Matrix – Fifth Grade Math

Topic	Subtracting Mixed Numbers	Multiplying Fractions	Fraction Division	Volume of Rectangular Prisms
CCSS Stand.	• 5.NF.1	• 5.NF.2	• 5.NF.7	• 5.MD.5
DOK 1 Example	Find the difference. $5\frac{1}{2} - 4\frac{2}{3}$	Find the product. $\frac{3}{7} \times \frac{2}{9}$	Find the quotient. $8 \div \frac{1}{5}$	Find the volume of a rectangular prism with side lengths of 3, 7, and 4 units.
DOK 2 Example	Using the digits 1 to 9 at most one time each, fill in the boxes to create three different mixed numbers that will make the equation true. You may reuse the same digits for each of the three mixed numbers. $5\frac{4}{5} - \frac{\square\square}{\square\square} = 3\frac{1}{20}$	Using the digits 1 to 9 at most one time each, place a digit in each box to make a true equation. $\frac{\square\square}{\square\square} \times \frac{\square\square}{\square\square} = \frac{2}{3}$	Using the digits 1 through 9, at most one time each, place a digit in each box to create two true equations: one where the quotient is greater than 40 and one where it's less than 40. You may reuse the same digits for each of the three mixed numbers. $\square \div \frac{1}{\square} = \square\square$	Using the digits 1 through 9, at most one time each, place a digit in each box to create two rectangular prisms where the larger one has double the volume of the other. 
DOK 3 Example	Using the digits 1 to 9 at most one time each, fill in the boxes to make the smallest difference. $\frac{\square\square\square}{\square\square} - \frac{\square\square\square}{\square\square}$	Using the digits 1 to 9 at most one time each, place a digit in each box to make a product that's as close to 4/11 as possible. $\frac{\square\square}{\square\square} \times \frac{\square\square}{\square\square}$	Using the digits 1 through 9, at most one time each, place a digit in each box to create an equation with the greatest possible quotient. $\square \div \frac{1}{\square} = \square\square$	Using the digits 1 through 9, at most one time each, place a digit in each box to create two rectangular prisms where the larger one has the greatest possible volume and is double the volume of the other. 