## Mathematics | Grade 8

The criteria at each level of proficiency are inclusive of those described at the prior levels.

| Outcomes | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| Number |  |  |  |  |
| Demonstrate an understanding of multiplying and dividing fractions, concretely, pictorially and symbolically. (N6) | Express a variety of numbers as equivalent fractions including the simplest form <br> Identify the operation required to solve a given problem involving positive fractions <br> Model, concretely or pictorially, addition and subtraction of fractions or mixed numbers, and record symbolically | Provide a context for multiplying or dividing two given positive fractions <br> Model multiplication and division of simple fractions and mixed numbers using a concrete model or pictorial representation | Model multiplication and division of simple fractions and mixed numbers using a pictorial representation and record the process symbolically <br> Solve problems involving multiplication and division of fractions and mixed numbers | Solve complex problems involving fractions and mixed numbers, applying order of operations when appropriate <br> Apply estimation strategies as appropriate to solve and determine reasonableness of solutions |

