**Unit 4: Radicals**

**Math 20-2 Assessment Standards**

**Number and Logic**

**Specific Outcome 3**. Solve problems that involve operations on radicals and radical expressions with numerical and variable radicands (limited to square roots).[CN, ME, PS, R]

3.1 Compare and order radical expressions with numerical radicands.

3.2 Express an entire radical with a numerical radicand as a mixed radical.

3.3 Express a mixed radical with a numerical radicand as an entire radical.

3.4 Perform one or more operations to simplify radical expressions with numerical or variable radicands.

3.5 Rationalize the monomial denominator of a radical expression. 3.6 Identify values of the variable for which the radical expression is defined.

**Specific Outcome** 4. Solve problems that involve radical equations (limited to square roots or cube roots). [C, PS, R]

*(It is intended that the equations have only one radical.)*

4.1 Determine any restrictions on values for the variable in a radical equation.

4.2 Determine, algebraically, the roots of a radical equation, and explain the process used to solve the equation.

4.3 Verify, by substitution, that the values determined in solving a radical equation are roots of the equation.

4.4 Explain why some roots determined in solving a radical equation are extraneous. 4.5 Solve problems by modelling a situation with a radical equation and solving the equation.

**What do the Student know from Math 10-C?**

Math Common students have a unit on exponents and radicals.

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**What do** **Student know from Math 20-1?**

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**What is Coming in Math 30-2**

There is a huge unit on exponents and logarithmic functions and equations.