

## **Grade 7 Mathematics**

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| <b>Number Sense and Numeration</b>  |
| <b><i>Overall Expectations</i></b>  |
| <ul style="list-style-type: none"><li>• represent, compare, and order numbers, including integers;</li><li>• demonstrate an understanding of addition and subtraction of fractions and integers, and apply a variety of computational strategies to solve problems involving whole numbers and decimal numbers;</li><li>• demonstrate an understanding of proportional relationships using percent, ratio, and rate.</li></ul>                                  |
| <b>Measurement</b>  |
| <b><i>Overall Expectations</i></b>  |
| <ul style="list-style-type: none"><li>• report on research into real-life applications of area measurements;</li><li>• determine the relationships among units and measurable attributes, including the area of a trapezoid and the volume of a right prism.</li></ul>  |
| <b>Geometry and Spatial Sense</b>   |
| <b><i>Overall Expectations</i></b>  |
| <ul style="list-style-type: none"><li>• construct related lines, and classify triangles, quadrilaterals, and prisms;</li><li>• develop an understanding of similarity, and distinguish similarity and congruence;</li><li>• describe location in the four quadrants of a coordinate system, dilate two-dimensional shapes, and apply transformations to create and analyse designs.</li></ul>   |
| <b>Patterning and Algebra</b>   |
| <b><i>Overall Expectations</i></b>  |
| <ul style="list-style-type: none"><li>• represent linear growing patterns (where the terms are whole numbers) using graphs, algebraic expressions, and equations;</li><li>• model linear relationships graphically and algebraically, and solve and verify algebraic equations, using a variety of strategies, including inspection, guess and check, and using a "balance" model.</li></ul>  |
| <b>Data Management and Probability</b>  |
| <b><i>Overall Expectations</i></b>  |
| <ul style="list-style-type: none"><li>• collect and organize categorical, discrete, or continuous primary data and secondary data and display the data using charts and graphs, including relative frequency tables and circle graphs;</li><li>• make and evaluate convincing arguments, based on the analysis of data;</li><li>• compare experimental probabilities with the theoretical probability of an outcome involving two independent events.</li></ul> |