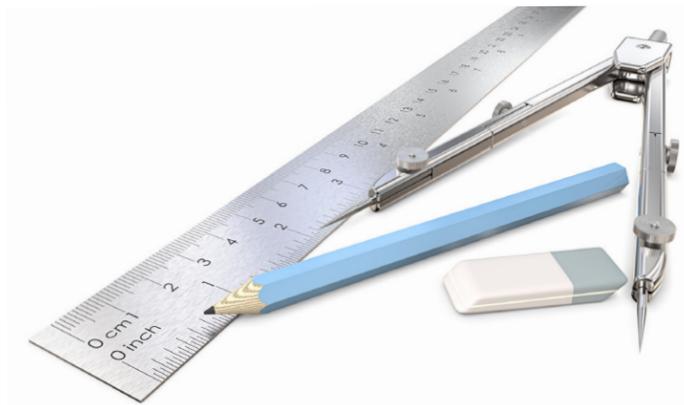## Math Learning in the Classroom

Math learning occurs in many ways in the classroom. Teachers observe students during daily work, have conversations with students about math ideas and look at the results of their math work.

If you have questions about math in the classroom or if your child needs additional support, please contact your child's teacher.

Be Positive and Supportive

When you talk about math ideas and show how math is part of daily life, you are showing how math is important. You can encourage your child to think positively and be persistent as you work together to build math confidence and math understanding.

The goal of this document is to support parents and caregivers as they promote positive math thinking. It also provides an overview of what Saskatchewan students will be taught in school in Grade 7.

Make Math Real at Home

- Discuss how math is part of everyday activities, such as sports, music and art.

- Comment on and discuss the meaning of charts and graphs that you may see online or in the news.

- Estimate and/or calculate the price of a take-out meal for your family.

- Calculate discounts and find the least expensive options for things such as cell phone plans.

- Interpret and compare sports statistics.

- Calculate travel times, taking breaks and time zones into account.

Online Resources for Grade 7 Math Students

These sites were active at the time of publication. Please review them to determine if they are appropriate for your child's needs and interests.

- **NRICH math** – interactive tasks and games for all grade levels: https://nrich.maths.org

- **Math is Fun** – games, puzzles, a math dictionary and more: www.mathsisfun.com

- **Mathpickle** – original math puzzles, games and problems: http://mathpickle.com

To view the entire Saskatchewan curriculum, go to *www.curriculum.gov.sk.ca*.

saskatchewan.ca

Saskatchewan

Overview of Grade 7 Math

NUMBER

- Learn divisibility rules for dividing by 2, 3, 4, 5, 6, 7, 8, 9 and 10.
  - For example, a number is divisible by three if the sum of the digits is divisible by 3; even numbers are always divisible by 2; numbers ending in 5 or 0 are divisible by 5.
- Understand the placement of decimals when adding, subtracting, multiplying and dividing; solve equations with two or more decimal numbers.
  - For 12.33 x 2.4, think 12 x 2 = 24; therefore the decimal in the final product will be placed so that the answer is in the tens (in this case, after the 24). The answer will not be in the ones or hundreds.

  Express decimals as fractions, and fractions as decimals, including repeating decimals.
  - Decimals such as 0.1 and 0.25 are terminating decimals, and as a fraction are written as $\frac{1}{10}$ and $\frac{25}{100}$.
  - The fraction $\frac{4}{33}$ expressed as a decimal is 0.121212121, which is written as $0.\overline{12}$, a repeating decimal.
- Order a set of numbers containing decimals, fractions and/or whole numbers.
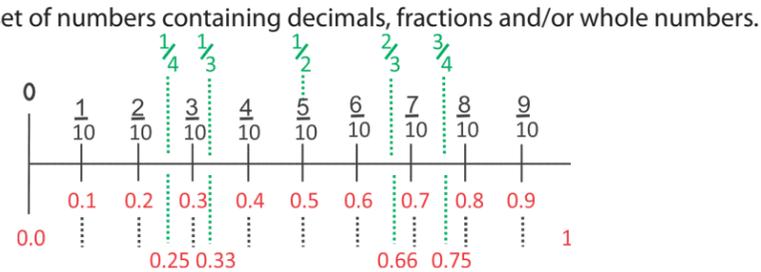
- Understand the meaning of percents between 0% and 100%.
  - If an item costs $39.99 and the additional taxes are 11%, what is the total cost of the item?
- Add and subtract positive fractions and mixed numbers.

$$\frac{1}{5} + \frac{1}{2} = \frac{7}{10} \qquad 3\frac{4}{8} - 1\frac{3}{8} = 2\frac{1}{8}$$
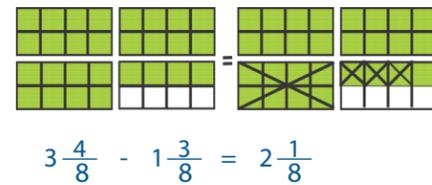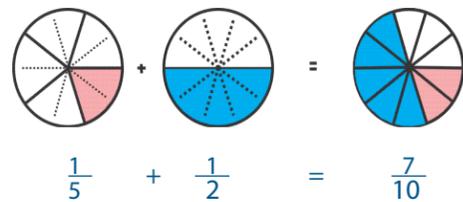
- Add and subtract integers.
  - For example, 6 + 3 = 9; -6 + 3 = -3; -6 + (-3) = -9; -3 − (-6) = +3

PATTERNS AND RELATIONS

- Understand relationships among patterns, graphs and linear relations.
  - A gaming site charges a $5 membership fee and $2 a day to play on the network.

$$y = 2x + 5$$

| Number of days (x)	1	2	3	4	5
Cost (y)	7	9	11	13	15

Cost to Use Gaming Site

- Find solutions to linear equations and solve problems using equations.
  - What value does "A" need to be to balance the scale? As an equation, this is written as A + 7 = 25.

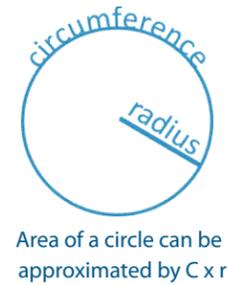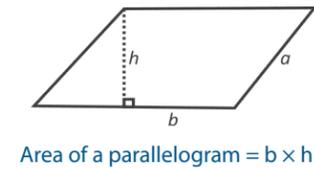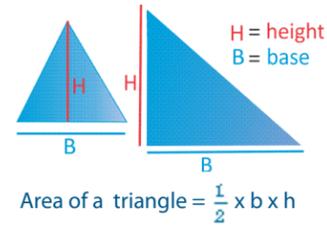

  - Kelly sorted 37 hockey cards into 4 groups with 5 cards left over. The number of cards in each group can be determined by using the equation 4x + 5 = 37, with x being the number of cards in each group.

SHAPE AND SPACE

- Understand circles, including diameter, radius, circumference and central angles.
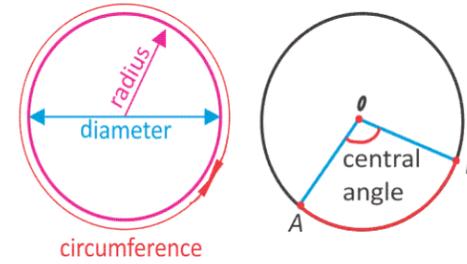
- Develop and use formulas for determining the area of triangles, parallelograms and approximating the area of circles.

  H = height
  B = base

  Area of a triangle = $\frac{1}{2}$ x b x h   Area of a parallelogram = b × h   Area of a circle can be approximated by C x r

- Draw parallel lines, perpendicular lines and bisectors.
- Identify and label points on a coordinate plane (x and y axis).
- Describe transformations, such as rotations and reflections.

  x and y axis   Rotation   Reflection
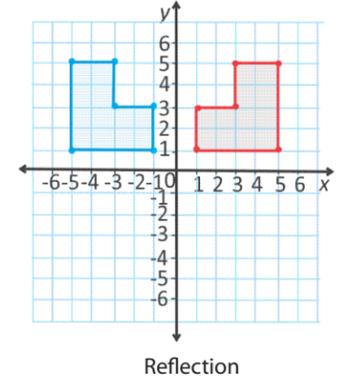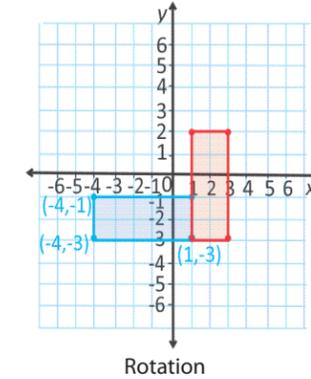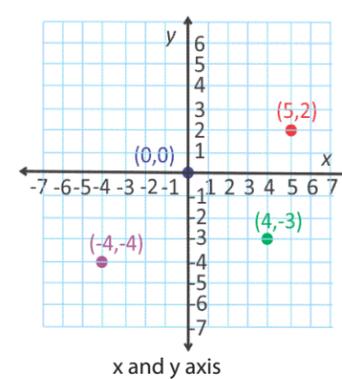
STATISTICS AND PROBABILITY

- Understand mean (average), median (number in the middle of a sorted list) and mode (number that occurs most often) and when it is most appropriate to use each when reporting findings.
- Interpret and create circle graphs.
- Understand simple probabilities for two independent events.
  - What is the probability of spinning a 2 and rolling a 6?

Favourite Type of Movie
SciFi 20%
Romance 30%
Comedy 20%
Action 25%
Drama 5%