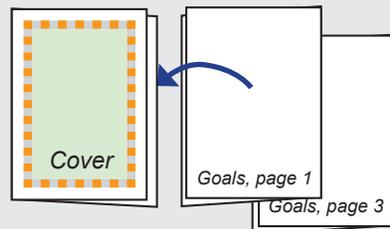## Common Core Standards for Mathematical Practice

MP1: Make sense of problems and persevere in solving them.

MP2: Reason abstractly and quantitatively.

MP3: Construct viable arguments and critique the reasoning of others.

MP4: Model with mathematics.

MP5: Use appropriate tools strategically.

MP6: Attend to precision.

MP7: Look for and make use of structure.

MP8: Look for and express regularity in repeated reasoning.

Making a Leaflet

Fold all three sheets in half as shown. Put goal pages 1-4 within cover sheet and staple along left edge.
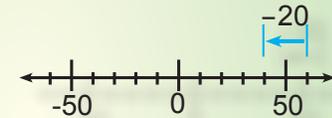
Cover

Goals, page 1

Goals, page 3

Name_____

COMMON CORE STATE STANDARDS

Grade 7 Math

Goals Checklist

$400 plus 20% tax

10% less than n

$\pi(3^2)$

$\dfrac{60 \text{ grams}}{2 \text{ hours}}$

$-3n + n$

6

Math Sense
by Angie Seltzer
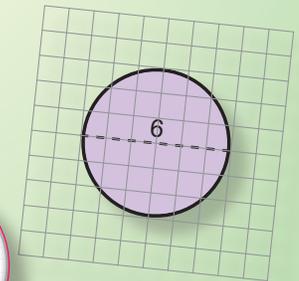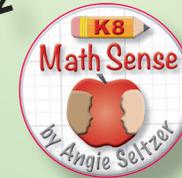
Courtesy of K8 Math Sense for 2022-2023

Grade 7 CCSS Math Goals

Name _____

Class _____ Date _____

For each goal that has been mastered, mark the box and write the date.

EXPRESSIONS AND EQUATIONS

1 Use properties of operations to generate equivalent expressions.

1. I can add and subtract linear expressions with rational coefficients. ☐ ____
2. I can expand or factor linear expressions. ☐ ____
3. I can interpret related expressions in real situations. ☐ ____

2 Solve real-life and mathematical problems using numerical and algebraic expressions and equations.

1. I can use operations with whole numbers to solve multi-step problems. ☐ ____
2. I can use fractions to solve multi-step problems. ☐ ____
3. I can use decimals to solve multi-step problems. ☐ ____
4. I can assess reasonableness of answers by using estimation. ☐ ____
5. I can solve linear equations of the form $px + q = r$ and $p(x + q) = r$. ☐ ____
6. I can write linear equations to solve word problems. ☐ ____
7. I can relate algebraic solutions to arithmetic solutions. ☐ ____
8. I can write and solve linear inequalities for situations. ☐ ____
9. I can graph and interpret solutions to inequalities. ☐ ____

RATIOS AND PROPORTIONAL RELATIONSHIPS

1 Analyze proportional relationships and use them to solve real-world and mathematical problems.

1. I can calculate unit rates associated with ratios of fractions. ☐ ____

2. I can decide if two ratios form a proportion. ☐ ____
3. I can find the missing value in a proportion. ☐ ____
4. I can identify unit rates from tables, diagrams, or graphs. ☐ ____
5. I can identify unit rates from equations or verbal descriptions. ☐ ____
6. I can write equations for proportional relationships. ☐ ____
7. I can interpret points on graphs of proportions. ☐ ____

2 Solve multi-step percent problems.

1. I can use percent to solve simple interest and tax problems. ☐ ____
2. I can use percent to solve markup and markdown problems. ☐ ____
3. I can use percent to solve problems about tips, commissions, and fees. ☐ ____
4. I can solve problems about percent of increase or decrease. ☐ ____
5. I can calculate percent error. ☐ ____

THE NUMBER SYSTEM

1 Apply and extend previous understandings of operations with fractions to add and subtract rational numbers.

1. I can relate sums of rational numbers to movements or situations. ☐ ____
2. I can relate subtraction of rational numbers to adding the opposite. ☐ ____
3. I can find distance between rational numbers on a number line. ☐ ____
4. I can add and subtract integers. ☐ ____
5. I can add and subtract rational numbers. ☐ ____

2 Apply and extend previous understandings of operations with fractions to multiply and divide rational numbers.

1. I can apply multiplication properties to rational numbers. ☐ ____

2. I can interpret products of rational numbers in real situations. ☐ ____

3. I can interpret quotients of rational numbers in real situations. ☐ ____

4. I can multiply and divide integers. ☐ ____

5. I can multiply and divide rational numbers. ☐ ____

6. I can write rational numbers as decimals. ☐ ____

7. I can compute with rational numbers to solve problems. ☐ ____

8. I can solve multi-step problems with rational numbers. ☐ ____

GEOMETRY

1 Draw, construct, and describe geometrical figures and describe the relationships between them.

1. I can compute lengths and areas from a scale drawing. ☐ ____

2. I can reproduce scale drawing using a different scale. ☐ ____

3. I can draw triangles given measures of sides or angles. ☐ ____

4. I can draw geometric shapes with given conditions. ☐ ____

5. I can describe two-dimensional figures that result from slicing solids. ☐ ____

2 Solve real-life and mathematical problems involving angle measure, area, surface area, and volume.

1. I can recognize relationships between parts of a circle. ☐ ____

2. I can apply formulas for circumference and area of circles. ☐ ____

3. I can solve equations to find supplementary, complementary, vertical, and adjacent angles. ☐ ____

4. I can solve problems involving area and surface area. ☐ ____

5. I can solve problems involving volume of rectangular prisms. ☐ ____

STATISTICS AND PROBABILITY

1 Use random sampling to draw inferences about a population.

1. I can identify representative sampling methods. ☐ ____

2. I can use a sample to draw inferences about a population. ☐ ____

3. I can compare predictions from various samples. ☐ ____

2 Draw informal comparative inferences about two populations.

1. I can visually compare the centers and spreads of distributions on dot plots. ☐ ____

2. I can use measures of center and variability to make inferences. ☐ ____

3 Investigate chance processes and develop, use, and evaluate probability models.

1. I can compare probabilities and relate to likelihoods of events. ☐ ____

2. I can use relative frequency of outcomes to approximate probability. ☐ ____

3. I can calculate simple probabilities based on equally-likely outcomes. ☐ ____

4. I can make predictions based on relative frequency, and compare results to predictions. ☐ ____

5. I can calculate probabilities of compound events. ☐ ____

6. I can create an organized list, table, or tree diagram for a compound event. ☐ ____

7. I can design and use simulations of compound events. ☐ ____