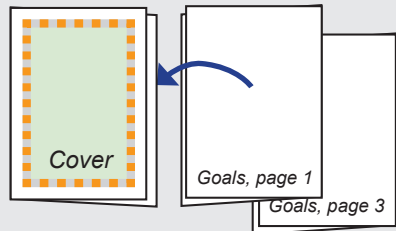


### Common Core Standards for Mathematical Practice

- 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.

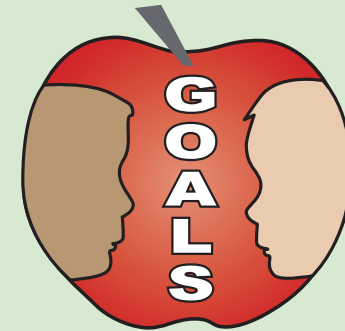


Name \_\_\_\_\_

## COMMON CORE STATE STANDARDS

# Grade 7 Math

# “I Can” Math Goals



*Clear Goals Form the **CORE**  
of the Grade 7 Math Program*

Courtesy of K-8 Math Sense for 2017-2018



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.  \_\_\_\_\_

Name \_\_\_\_\_

- 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.

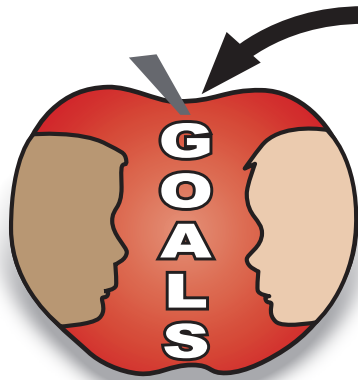
1. I can identify representative sampling methods.  \_\_\_\_\_
2. I can use a sample to draw inferences about a population.  \_\_\_\_\_
3. I can compare predictions from various samples.  \_\_\_\_\_

**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.  \_\_\_\_\_

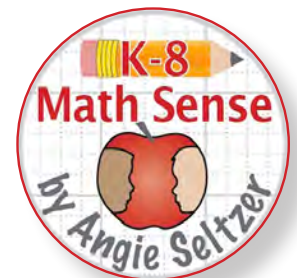


## Clear Goals Form the **CORE** of a Sensible Math Program

**ALIGN • COMMUNICATE • ASSESS & TRACK • USE GAMES**

- 1** How can you **ALIGN** goals to the math standards?
- 2** How can you effectively **COMMUNICATE** the goals?
- 3** How can you easily **ASSESS** all of the year's goals?
- 4** How can you **TRACK** students' progress towards mastering the goals?
- 5** How can you **USE GAMES** to help students meet the goals?

*Resources from **K-8 Math Sense** will help you and your students achieve the year's goals.*

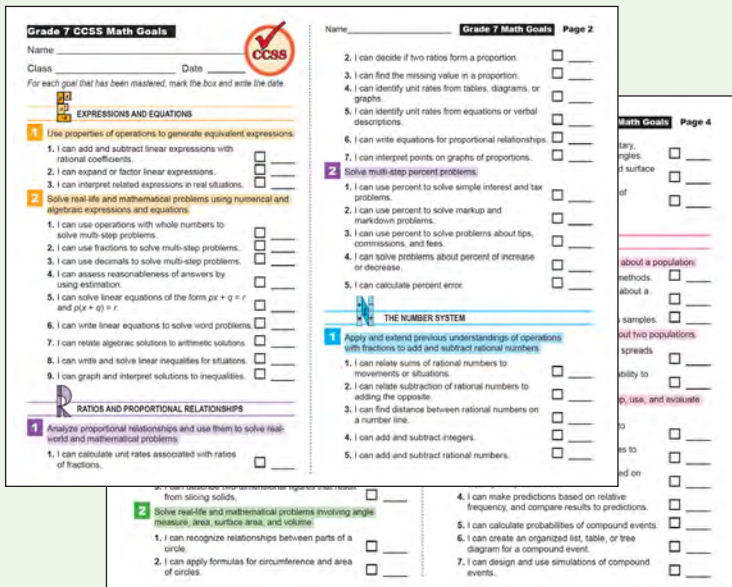




# How can you **ALIGN** goals to the math standards?



## FREE Math Goal Leaflets



## Correlations to Common Core

These tables show alignment of the goals to the Common Core standards. The shaded rows show codes for CCSS cluster statements. If your district has its own standards, fill in the numbers in the right column.

GOAL	CCSS
7-N1	7.NS.A
7-N11	7.NS.1ab
7-N12	7.NS.1c
7-N13	7.NS.1c
7-N14	7.NS.1d
7-N15	7.NS.1d
7-N2	7.NS.A
7-N21	7.NS.2a
7-N22	7.NS.2a
7-N23	7.NS.2b
7-N24	7.NS.2b
7-N25	7.NS.2c
7-N26	7.NS.2d
7-N27	7.NS.3
7-N28	7.NS.3

GOAL	CCSS
7-E1	7.EE.A
7-E11	7.EE.1
7-E12	7.EE.2
7-E13	7.EE.2
7-E3	7.EE.B
7-E21	7.EE.3
7-E22	7.EE.3
7-E23	7.EE.3
7-E24	7.EE.3
7-E25	7.EE.4a
7-E26	7.EE.4a
7-E27	7.EE.4a
7-E28	7.EE.4b
7-E29	7.EE.4b
7-R1	7.RP.A
7-R11	7.RP.1
7-R12	7.RP.2a
7-R13	7.RP.2a
7-R14	7.RP.2b
7-R15	7.RP.2b
7-R16	7.RP.2c
7-R17	7.RP.2d
7-R2	7.RP.A
7-R21	7.RP.3
7-R22	7.RP.3
7-R23	7.RP.3
7-R24	7.RP.3
7-R25	7.RP.3

GOAL	CCSS
7-G1	7.G.A
7-G11	7.G.1
7-G12	7.G.1
7-G13	7.G.2
7-G14	7.G.2
7-G15	7.G.3
7-G2	7.G.B
7-G21	7.G.4
7-G22	7.G.4
7-G23	7.G.5
7-G24	7.G.6
7-G25	7.G.6
7-S1	7.SP.A
7-S11	7.SP.1
7-S12	7.SP.2
7-S13	7.SP.2
7-S2	7.SP.B
7-S21	7.SP.3
7-S22	7.SP.4
7-M3	7.MD.C
7-S31	7.SP.5
7-S32	7.SP.6
7-S33	7.SP.7a
7-S34	7.SP.7b
7-S35	7.SP.8a
7-S36	7.SP.8b
7-S37	7.SP.8c

The goals in the FREE leaflets were written to match the Common Core standards with student-friendly language. These goals form the basis of all other resources by Angie Seltzer from K-8 Math Sense.

Domain Colors and Letters	
<b>E</b>	EXPRESSIONS & EQUATIONS
<b>G</b>	GEOMETRY
<b>N</b>	THE NUMBER SYSTEM
<b>R</b>	RATIOS AND PROPORTIONAL RELATIONSHIPS
<b>S</b>	STATISTICS AND PROBABILITY







# How can you effectively **COMMUNICATE** the goals?



## Common Core Math Communication **BUNDLE**

Get four resources for displaying and discussing Grade 7 math goals.

COMMON CORE STATE STANDARDS  
**Math Checklist Posters**

**4 Posters**

- Grades 6, 7, & 8 math goals checklists
- Overview of Grades 6, 7, & 8 clusters, with list of 8 mathematical practices

**GRADE 7**

### CHECKLIST POSTERS

All Grade 7 goals are on one 11" by 17" poster. Also includes posters for the prior and next grades.

COMMON CORE STATE STANDARDS  
**Grade 7 Math Class Goal Signs**

Angie Seltzer

**41 Canva Format**

### CLASS GOAL SIGNS

Each goal is a separate 8.5" by 11" sign. Display a goal each day. Add your own custom goals.

COMMON CORE STATE STANDARDS  
**Grade 7 Math Student's Checklist of Goals**

Angie Seltzer

**INCLUDES 2 FORMS**

Written & Designed by Angie Seltzer

### STUDENT'S CHECKLIST

All Grade 7 goals are on two 8.5" by 11" pages. Keep in students' folders. Choose from two layouts.

**Grades 6-8**  
**Focus on the Mathematical Practices**

Make sense of problems and persevere in solving them.

Includes **48** Focus Signs & Cards

by Angie Seltzer

### FOCUS ON THE MATH PRACTICES

Display and discuss five strategies for each of the 8 MP standards. Focus cards help during problem solving.

### What teachers are saying...

"I like this whole series of resources. Useful, consistent, and well-organized. Thank you!"

"Amazing resource. A must have."

"Love this! Made posters for my room! Look Great!"



**PRICE: \$9.95**  
**PAGES: 160**

Written and designed by Angie Seltzer

[www.k8mathsense.com](http://www.k8mathsense.com)



# How can you easily **ASSESS** all of the year's goals?



## Math Self-Assessment & Review BUNDLE (Forms A-D)

COMMON CORE STATE STANDARDS

**Grade 7 Math**

**Self-Assessment & Review BUNDLE**

by Angie Seltzer

Check progress on ALL goals 4 times!

**FORMS A-B-C-D**

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_ Form A

**DOMAIN 6 CLUSTER 2: Solve multi-step percent problems.** Review Do you understand?

Questions	Review	Do you understand?
1. Use percent to solve simple interest and tax problems. (7.NF.3)	75-76	YES - NO
2. Use percent to solve markup and markdown problems. (7.NF.3)	77-78	YES - NO
3. Use percent to solve problems about tax, commission, and fees. (7.NF.3)	85-82	YES - NO
4. Solve problems about percent of increase or decrease. (7.NF.3)	83	YES - NO

75. A person buys a shirt for \$25.00 plus 8% tax. What is the total price?

76. Suppose you deposit \$500 into a savings account. If the account earns 2% interest per month, how much money will be in the account after one month? Assume that you do not withdraw any money.

77. The price of a baseball cap is marked down 20% from the original price of \$17.25. What is the sale price?

78. A store owner paid \$8.25 each for shirts and sold them for \$25.00 each. What was the percent markup?

79. Taylor has an online bank account that charges a fee of 2.5% on each deposit. What is the fee for a deposit of \$25.00? Round to the nearest cent.

80. Ryan and his family paid \$98.00 for a restaurant meal. They want to leave a 15% tip for their server. How much by should they leave?

81. A student estimated the height of a tree as 47 feet. If the actual height is 53 feet, what is the percent error rounded to the nearest percent? Show your work.

82. Refer to Question 81. In Wednesday's attendance the same as on Monday? Explain why or why not.

83. A student estimated the height of a tree as 47 feet. If the actual height is 53 feet, what is the percent error rounded to the nearest percent? Show your work.

### Sample Pages

Grade 7 Self-Assessment & Review

**EXPRESSIONS AND EQUATIONS**

Do you understand the skills below? Answer the review questions. Show your work.

**DOMAIN 1 CLUSTER 1: Apply and extend previous understandings of operations with numbers to add and subtract rational numbers.** Review Do you understand?

Questions	Review	Do you understand?
1. Add and subtract integers. (7.NS.1)	33-35	YES - NO
2. Multiply and divide integers. (7.NS.1)	36-37	YES - NO
3. Add and subtract rational numbers. (7.NS.1)	38	YES - NO
4. Add and subtract integers. (7.NS.1)	39-41	YES - NO
5. Add and subtract rational numbers. (7.NS.1)	42-43	YES - NO

18. The two triangles are similar. What scale factor maps triangle ABC onto DEF?

19. A scale drawing of a flower bed is shown. Each side of a grid square represents 2 units. On the grid below, make a scale drawing of the same flower bed using the scale shown.

20. On separate paper, use a ruler to draw two segments AB that are about 8 cm long. With a protractor, create triangle ABC with a 30-degree angle at A and a 150-degree angle at C. What is the measure of angle B?

21. On separate paper, draw a right triangle with two legs that measure 3.0 cm and 3.2 cm. Then measure the hypotenuse of the triangle (the longest side) to the nearest tenth centimeter.

22. Suppose a solid cylinder is sliced in half, either perpendicular or parallel to the bases. Name two different two-dimensional shapes that can be formed by the cut surface.

Name: \_\_\_\_\_ Class: \_\_\_\_\_ Date: \_\_\_\_\_ Form A

**THE NUMBER SYSTEM**

Do you understand the skills below? Answer the review questions. Show your work.

**DOMAIN 1 CLUSTER 1: Apply and extend previous understandings of operations with numbers to add and subtract rational numbers.** Review Do you understand?

Questions	Review	Do you understand?
1. Add and subtract integers. (7.NS.1)	33-35	YES - NO
2. Multiply and divide integers. (7.NS.1)	36-37	YES - NO
3. Add and subtract rational numbers. (7.NS.1)	38	YES - NO
4. Add and subtract integers. (7.NS.1)	39-41	YES - NO
5. Add and subtract rational numbers. (7.NS.1)	42-43	YES - NO

34. A plane was flying at an altitude of 16,000 feet above the ocean and then descended 4,000 feet. How far above the ocean is the plane now? What was the new altitude?

35. How many units are 1 unit from Point C?

36. Adding -36 is the same as subtracting what number?

37. Mark left the (checkbox) with the same value as  $-45 - (-25)$ .

38. What is the distance between the two numbers shown on the number line?

39. What is the sum of -36 and 20?

40. Add  $-23 + 45$ .

41. Subtract  $-35 - (-4)$ .

42. Subtract  $58 - 99$ .

43. Simplify  $5 + (-3) - 14 + 20 - 5 + 15$ .

44. Simplify  $3 - (-5) - 1$ .

45. What is the value of the expression  $-2 + (-3) + (-4)$ ?

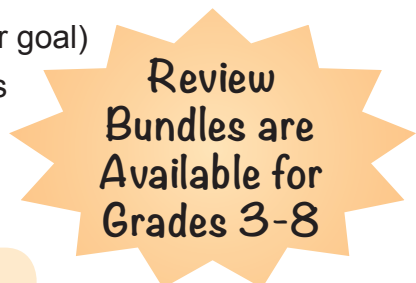
46. Simplify  $-\frac{1}{10} - 4.01 - 4.021$ . Write the answer as a decimal.

### OVERVIEW

View goals and related review questions aligned to ALL Common Core math standards. This bundle includes four parallel versions, A-D, for Grade 7. Use throughout the year to check progress. Even if your state is using a variation of CCSS, the content is likely to match closely.

### FEATURES OF EACH REVIEW PACKET

- Self-assessment checklist of goals for each Common Core cluster
- 100 review questions (at least one per goal)
- 11 student pages and 4 answer pages
- Paper-saving two-column layout



### What teachers are saying...

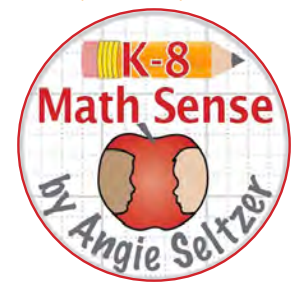
"Love the four packets and that is broken down by standard and the kiddos can know exactly what they are mastering in each question!"

"These are awesome!"

"I like that I can use this for student growth. Thank you!"

"This is an excellent study guide for state testing, and allows students to evaluate and self-asses their work."

"Love this tool!!!"



**PRICE: \$12.50**  
**PAGES: 68**

Written and designed by Angie Seltzer

www.k8mathsense.com

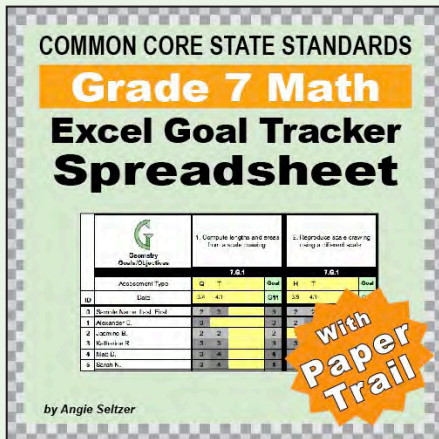




# How can you **TRACK** students' progress towards mastering the goals?

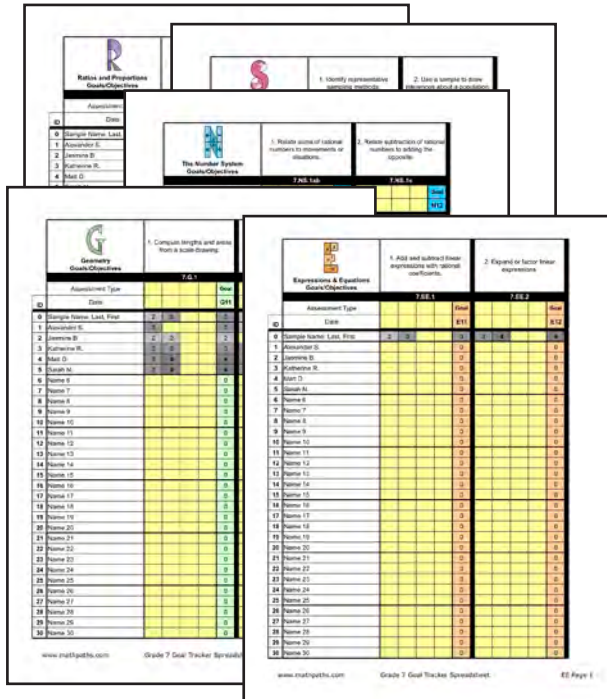


## EXCEL Goal Tracker Spreadsheet



### OVERVIEW

This product provides the tools you need to easily plan and track progress of all 59 Grade 7 math goals using Excel. An interactive Preview is available.

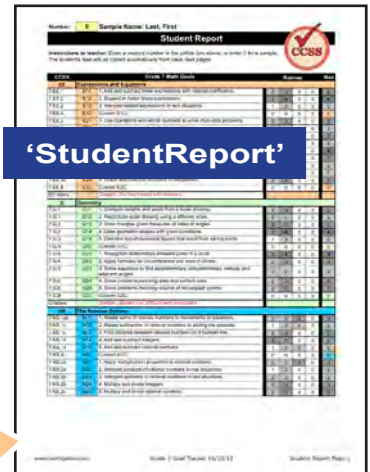
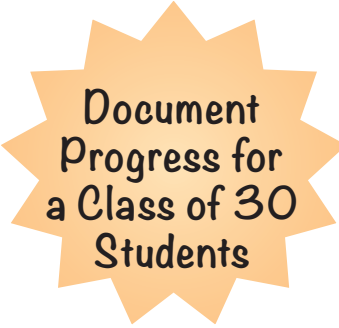


**What teachers are saying...**  
"THIS is AMAZING~! Thank you, thank you, thank you!!!"  
"Excellent Stuff. Very Useful!!!"  
"This is exactly what I've been looking for to track concept mastery. I absolutely love the interconnected files, saving time and effort.."

### FEATURES

- Tabbed worksheets for each domain show all goals and space for custom goals.
- Enter up to 30 students' names on one sheet and they are automatically copied to the other sheets.
- Record progress four times for each goal. Entries are shaded so you can see mastery levels at-a-glance.
- The "Paper Trail" is a quick way to document class progress on any goal.
- View class summaries for each goal or all progress for one student.
- Comes with a 80-page PDF of all Excel pages.

### 'PaperTrail' Class Goal Assessments



**PRICE: \$9.95**  
**PAGES: 80**





# How can you **USE GAMES** to help students meet the goals?



## Multi-Match Math Games BUNDLE

### OVERVIEW

This bundle includes 17 card sets aligned to key Grade 7 goals. Card sets are quick-prep – just print 5 sheets of paper, cut, and play! You'll also get a Games Guide with instructions for four games in English and Spanish. Play the games with any card set.



**PRICE: \$14.00**

**PAGES: 182**

### FEATURES OF EACH SET

- 36 math cards as 9 groups of four cards, one from each of four suits
- A recording sheet and answer key
- A handy folding card storage pocket
- Brief instruction cards for four games
- Perfect to use in a math center, by partners or groups
- Great for emphasizing Common Core MP standards

Goal	Grade 7 Card Sets
7-E11	<b>E</b> Simplifying Linear Expressions
7-E12	<b>E</b> Expressions for Percent More & Less
7-G22	<b>G</b> Circumference & Area of Circles
7-G22	<b>G</b> A Round of Pi: Area and Perimeter of Rounded Shapes (4 Card Sets)
7-G25	<b>G</b> Volume of Rectangular Prisms
7-N11	<b>N</b> Adding Integers Using Chips
7-N11	<b>N</b> Adding Integers on a Number Line
7-N12	<b>N</b> Relating Subtraction of Integers to Addition
7-N13	<b>N</b> <b>FREE</b> Distance Between Integers on a Number Line
7-N24	<b>N</b> Multiplying Integers on the Number Line
7-N24	<b>N</b> Relating Division of Integers to Multiplication
7-R12	<b>R</b> Equivalent Rates
7-R21	<b>R</b> Tax and Interest
7-S33	<b>S</b> Simple Probability

### What teachers are saying...

- “Thank you for all the hard work you have put into providing these fantastic resources!”
- “This is awesome! Great value!”
- “My students love these card games.”
- “These are terrific - very engaging, and they will encourage higher-level thinking and good discussions between the kids.”
- “Super high quality resource! Thank you for creating this! This is great as a bellringer activity.”
- “Loved the versatility.”

