

RESOURCE DETAILS

Resource: 7th Grade Math Common Core Mini Assessments

Suggested Class Time: 15 – 30 minutes per assessment

The Big Idea

- Students are given an assessment on a particular topic.
- The assessments are less than 10 questions each, which makes them great for a quiz or homework assignment.

Materials Needed

- One copy of each page per student
- Pencils

Suggestions For Use

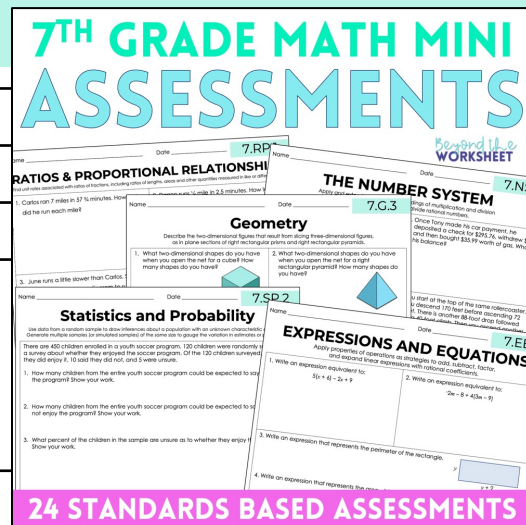
- Quizzes
- Homework
- End of year review for 7th
- Summer prep for 8th
- Beginning of year assessment for 8th

Tips

- Print in landscape and 2 per page to save paper if your students can handle a smaller writing space.
- It may be helpful for some students to provide a "cheat sheet" if it has been a while since you covered a particular concept.

Skills Covered

- Ratios of Proportional Relationships (pages 2 – 4)
- The Number System (pages 5 – 7)
- Expressions and Equations (pages 8 – 11)
- Geometry (pages 12 – 17)
- Statistics and Probability (pages 18 – 25)



Available with and without CCSS!

With CCSS Labeling

Name _____ Date _____ **7.RP.2**

RATIOS & PROPORTIONAL RELATIONSHIPS

Recognize and represent proportional relationships between quantities.

- Are the two ratios below proportional?
 $\frac{3}{5}$ $\frac{10}{6}$
- Are the two ratios below proportional?
- What is the unit rate shown in the graph to the right?
- Explain what the unit rate means in the context of the problem.
- The amount of money Sean makes each day depends on how many hours he works. Write an equation that represents the total, T , Sean makes each day by working h hours, and a certain pay rate, r .

Name _____ Date _____ **7.EE.1**

EXPRESSIONS AND EQUATIONS

Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients.

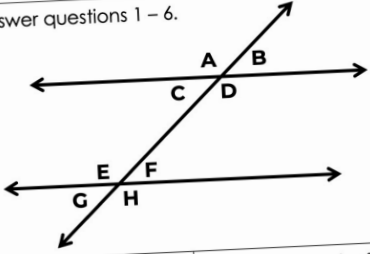
- Write an expression equivalent to:
 $5(x + 6) - 2x + 9$
- Write an expression equivalent to:
 $-2m - 8 + 4(3m - 9)$
- Write an expression that represents the perimeter of the rectangle.

- Write an expression that represents the area of the rectangle.

Name _____ Date _____ **7.G.5**

Geometry

Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure.

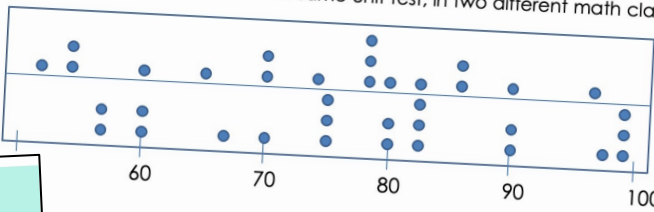
- Use the diagram below to answer questions 1 – 6.
- 
- What is the difference between complementary and supplementary angles?
 - Name a pair of each:
 - Supplementary angles
 - Vertical angles
 - Adjacent angles
 - If angle A is 105° , what is the measurement of angle F?
 - If angle F is 80° , what is the measurement of angle D?

Name _____ Date _____ **7.SP.4**

Statistics and Probability

Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations.

The dot plots below show average test scores for the same unit test, in two different math classes.

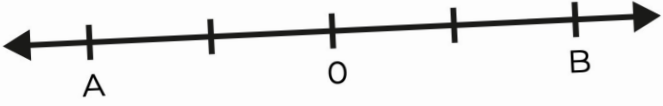


Score	Mr. Campos' Class	Ms. Miller's Class
60	2	0
65	1	0
70	3	2
75	2	3
80	4	4
85	1	2
90	0	1
95	0	1
100	0	1

Name _____ Date _____ **7.NS.1**

THE NUMBER SYSTEM

Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram.

- What is the sum of these two numbers if they are the same distance from zero? Explain how you found your answer.

- If you add A and B from the number line below, will you end up with a positive or negative sum? Explain how you found your answer.


- Ms. Miller's class scores are representative of the scores for all of 7th grade on this test. If there are 450 7th graders, based on Ms. Miller's scores, how many of all 7th graders will have scored an 80% or higher on this test?
- While Ms. Miller's class was representative of all 7th graders at your school, Mr. Campos' class is representative of all 7th graders in the district. If there are 2,576 7th graders in the district, how many would be expected to score a 70% or higher on this test?

And without!

Name _____ Date _____

MULTI-STEP PERCENTS

RATIOS & PROPORTIONAL RELATIONSHIPS

Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, discounts, sales tax, gratuities and commissions, fees, percent increase and decrease, and percent decrease.

1. You want to buy DVDs and are searching for the best price. You found two stores. Circle the one that offers the best percentage off. Explain your answer.
- Store 1 – Buy 2 for the price of one!
Store 2 – Buy 3 for the price of two!
2. Ellie can type 105 words in 3 minutes. Vivian can type 120 words in 4 minutes. How many words can each girl type in one minute?
- Ellie: _____ Vivian: _____
3. How many words can each girl type in 10 minutes? Ellie: _____
4. Carla and Joe are servers at a restaurant. Carla received a 20% tip on a \$55 dinner bill. Joe received a 15% tip on a \$70 dinner bill. How much more money did Carla receive than Joe?
5. 800 people went to the game last week. This week 15% more people went. How many people went to the game this week?

Name _____ Date _____

EQUATIONS AND INEQUALITIES

EXPRESSIONS AND EQUATIONS

Use variables to represent quantities in a real-world or mathematical problem and construct simple equations and inequalities to solve problems by reasoning about the quantities.

1. You are working to save money for a trip. You need to save at least \$1,000. If you already have \$350 saved, and make \$8 an hour at your job, write an inequality to represent how many hours, h , you need to work to make the rest of the money.

2. Solve the inequality. Explain what the answer means in the context of the problem.

3. Shelby made \$200 from selling candy bars. Large candy bars, x , sell for \$4 each and smaller candy bars, y , sell for \$2 each. Write an equation to represent how many of each type of candy bar she sold to earn the \$200.

4. Shelby sold 22 large candy bars. Solve the equation you wrote in #2 to determine how many small candy bars she sold.

Name _____ Date _____

NETS

Geometry

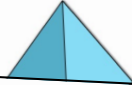
Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids.

1. What two-dimensional shapes do you have when you open the net for a cube? How many shapes do you have?



Sketch this net.

2. What two-dimensional shapes do you have when you open the net for a right rectangular pyramid? How many shapes do you have?



Sketch this net.

Carson ran $4\frac{1}{4}$ miles on Monday, $5\frac{1}{3}$ miles on Wednesday and x miles on Friday. Write an equation to represent the sum of the miles Carson ran over the three days.

How many miles Carson ran on Friday.

Name _____ Date _____

COMPOUND PROBABILITY

Statistics and Probability

Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation.

1. You roll two number cubes. What is the probability of rolling a 4, followed by an odd number?

2. You roll two number cubes. What is the probability of rolling an even number, followed by a number other than 1?

3. You roll a number cube and spin a four-sectioned spinner labeled 1-4. What is the probability that you roll a number less than 5 and spin a 2?

4. You roll a number cube and spin a four-sectioned spinner labeled 1-4. What is the probability that you roll a number less than 5 and spin a 2?

Name _____ Date _____

MULTIPLY & DIVIDE INTEGERS

THE NUMBER SYSTEM

Apply and extend previous understandings of multiplication and division of fractions to multiply and divide rational numbers.

1. Find the product: $-5 \cdot 8$

2. Find the quotient: $-15 \div -3$

3. Convert the given fraction to a decimal by setting the denominator equal to 1,000.

4. Convert the given fraction to a decimal by setting the denominator equal to 100.

at a kids' meal. There are 6 different toys that are randomly put into the meal. You are going to carry out the simulation, so be sure it is something you can do!