

Math 3, Classwork 20

WARM UP

		Make friends with pare	enthesis.		
•	Make sure you worked out the operations in the right order:				
	4 ×3 + 2 =	$12 - 3 \times 2 =$	$5 \times 4 - 2 =$		
	$4 + 3 \times 2 =$	$(12 - 3) \times 2 =$	$5 \times (4 - 2) =$		
	$(4+3) \times 2 =$	$12 \times 2 - 3 \times 2 =$	$5 \times 4 - 5 \times 2 =$		
w	rite down an expression	n which matches the statem	ent.		
	a) 11 added to the difference of 7 and 4				
	b) 12 subtracted from the product of 12 and 3				
	c) the product of 6 and 7 added to the product of 8 and 9				
	d) the quotient of 1	(11) 1.1 1.1 1.1	ma product of 5 and		
	d) the quotient of 1	6 and 4 was subtracted from	in a product of 5 and		
		6 and 4 was subtracted from	If a product of 5 and		
		6 and 4 was subtracted from	If a product of 5 and		
• In	sert parenthesis where i	heeded to make equalities c	orrect:		
• In 2 •	sert parenthesis where 1 + 4 × 6 + 8 = 34	heeded to make equalities c $2 + 4 \times 2$	For the foundation of the formation $6 + 8 = 44$		
• In 2 • 2 •	sert parenthesis where 1 + 4 × 6 + 8 = 34 + 4 × 6 + 8 = 58	heeded to make equalities c $2 + 4 \times 2 + 4 \times $	For a product of 5 and correct: 6 + 8 = 44 6 + 8 = 84		
• In 2 • 2 • Si	sert parenthesis where 1 + 4 × 6 + 8 = 34 + 4 × 6 + 8 = 58 mplify:	heeded to make equalities c $2 + 4 \times 2 + 4 \times 2 + 4 \times 2$	For rect: 6 + 8 = 44 6 + 8 = 84		
In 2 - 2 - Si 17	sert parenthesis where 1 + 4 × 6 + 8 = 34 + 4 × 6 + 8 = 58 mplify: $7 - 24 \div 2 + 4 \times 3 = $	heeded to make equalities c $2 + 4 \times 2 + 4 \times 2$	For rect: 6 + 8 = 44 6 + 8 = 84		



	Lesson 20Parenthesis. Units of Measurements. Long Division.		
5.	Ved has received a digital scale as a present for his birthday. He decided to play with and weigh different objects.		
	a) First, he put one marshmallow on the scale, and it reads 7g. Assuming that all marshmallows have the same weigh, how much 10 marshmallows will weigh?		
	b) Next he puts 10 jellybeans on the scale, and it reads 12g. How much would 1 jellybean weigh?		
	 c) Next he puts 10 new erasers on the scale and got 310g. How much would you expect 100 erasers to weigh? 1,000 erasers? 1 eraser? 		
6.	a) Ms. Svetlana bough 100 pencils for her class of 10 students for the entire year.		
	How many pencits each student got, if she gave the same number to each of them?		
	b) A 1-liter bottle with an apple juice was equally divided between 10 children. How many milliliters each child got? How many drops it'll be if one milliliter equals 20 drops?		
	Place Value for Multi-digit whole numbers		
Remember, that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.			
7	One-digit-one-line Long Multiplication. Remember about Place Value!		
.	a) $23 \times 11 =$ b) $234 \times 111 =$ c) $2345 \times 1111 =$		



NEW MATERIAL

Long Division

Long division is simply an algorithm for dividing two numbers, obtaining the quotient one digit at a time.

While doing a long division, you would be given one number (called the divisor) that you have to divide into another number (called the dividend). You set up the long-division symbol, insert the two numbers where they belong, and then start making guesses as to what should go on top of the symbol.

Example:



8. Use an example above and divide:

a)
$$243 \div 3 =$$

b) 576 ÷ 8 =

	Lesson 20 Parenthesis, Units of Measurements, Long Division,				
	c) $511 \div 7 =$				
9.	To get one glass of freshly squeezed orange juice, we need to take 4 oranges. How				
	many oranges do we need to take to make 10L of orange juice? (1L is 4 full				
	glasses)				
10.	The measure of the interior angles of dodecagon add up to 1 800				
	degrees. If dodecagon has 3 right angles and the other 9 angles				
	are all equal, what is the degree measure of the nine equal angles?				
Did you know					
	Adopted from an article, written by Editors of Encyclopedia Britannica				
	The metric system was first developed in France during the French Revolution Δ				
	French law passed in 1795 defined five units of measure. Three of these names are				
	still in use today. They are the meter , which is the unit of length, the gram that is				
	the unit of mass and the liter , which is the unit of volume.				
	According to the law, all metric units were derived from the metre, including the				
	gram for weight (one cubic centemetre of water at its maximum density) and the				
	litre for capacity (1/1,000 of a cubic metre).				
	Greek prefixes were established for multiples of 10. <i>mvria</i> (10.000). <i>kilo</i> (1.000).				
	<i>hecto</i> (100), and <i>deca</i> (10), while Latin prefixes were selected for the submultiples,				
	milli (0.001), centi (0.01), and deci (0.1). Thus, a kilogram equals 1,000 grams, a				
	millimetre 1/1,000 of a metre.				

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Lesson 20 Parenthesis. Units of Measurements. Long Division.

The meter was originally defined as being $\frac{1}{10,000,000}$ of the distance between the North Pole and the Equator on the meridian that passed through Paris. In 1799, a platinum bar that was equal to this length was made and became the "prototype meter"

Not until 1875 did an international conference meet in Paris to establish an International Bureau of Weights and Measures. The Treaty of the Metre signed there provided for a permanent laboratory in Sèvres, near Paris, where international standards are kept, national standard copies inspected, and metrological research conducted. The General Conference on Weights and Measures (CGPM), with diplomatic representatives of some 40 countries, meets every six years to consider reform. The conference selects 18 scientists who form the International Committee for Weights and Measures that governs the bureau.

In 1960 the rules for the metric system were revised. The revised system was called the "International System of Units" (which is often written "SI" for short). The definition of SI also included rules for writing SI quantities. These rules are the same for all languages.

The United States, Myanmar (Burma) and Liberia do not use the metric system,



making up 5% of the world 's population not using the system.

In the metric system, all units have a "symbol". Symbols are a shorthand way of writing the names of units. Everybody uses the symbol "m" for meter, "km" for "kilometer", "l" for liter, "ml" for milliliter, "g" for gram, etc.

Forty feet underground in Gaithersburg, Maryland, in a bright white laboratory that requires three separate keys to enter, the United States stores a precious collection of small, shiny metal cylinders that literally define the mass of everything in this country. Seven copies of the International Prototype Kilogram (has been housed in



Lesson 20 Parenthesis. Units of Measurements. Long Division.

International Bureau of Weights and Measures in Sèvres, France since 1889) are stored in the National Institutes of Standards and Technology (NIST).