Big Apple Academy
2021
Mathematics Department

Summer Math Homework Package Grade 5 → 6

It is important that you keep practicing your mathematical Knowledge over the summer to be ready for 6th grade. In this Package you will find a calendar of activities for the month of July and August.

What should you do?

- Take a new notebook for every-day practice. For each day you will need 2 pages;
- Start each day with vocabulary words: copy each word from the given day-list, find and write the meaning of each word in your notebook on the front page (pages 1,3,5, . . . and so on):

https://dynamiclearningmaps.org/sites/default/files/documents/ERP/dlm_math_glossary.pdf

- Use the internet to find the meaning of each word you do not know;
- Solve the problem of the day and write the solution with full explanation on the back page (pages 2,4,6,. . . and so on);
- Have the date of the entry. Have a clear and complete answer. Be neat and organize.

Do not forget to bring your notebook to school on September 9, 2021 - the first school day.

Have a Great Summer!!

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July 5 → 6 **Monday**	**Tuesday**	**Wednesday**	Absolute Value **Thursday 1**	Variable Expression Equation Properties of equality **Friday 2**	Decimal Negative power of ten **Saturday 3**	**Incoming 6th Grade**
Prime Factorization **5**	Divisibility Divisibility rules **6**	Prime and composite numbers **7**	GCF LCM **8**	Equivalent fractions LCD Simplest form **9**	Like denominators unlike denominators **10**	**Summer Home Work VOCABULARY**
Mixed numbers Improper fraction **12**	Reciprocal Multiplicative inverse **13**	Ratio Equal ratios Rate Unit rate **14**	Proportion Cross product **15**	Like Terms **16**	Percent **17**	
Convert percent to fraction and decimal Convert fraction and decimal to percent **19**	Percent of a number **20**	Sales tax Total cost **21**	Discount Sale price **22**	Inequality **23**	Distance on Coordinate Plane **24**	
Dot plot **26**	Opposites Integers Absolute value **27**	Rational numbers **28**	Exponential form base exponent expanded form **29**	Round Estimate Clustering **30**	Order of operations Properties of operations **31**	

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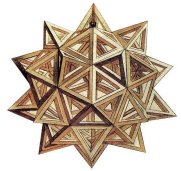
July **5 → 6** **Monday**	. **Tuesday**	**Wednesday**	Find absolute value of each number 25, 0, -19, -(-5). **Thursday** **1**	Decide if the solution is correct. 12n – 5 = 4n + 35 n = 4 **Friday** **2**	In the number 44.444 which digit has 1/10 the value of the 4 in the hundredth place? **Saturday** **3**	**Incoming 6th Grade**
Write the prime factorization for each number using Exponents. 504 2700 **5**	I am a 3-digit number less than 300. I am divisible by 2 and 5, but not 3. The sum of my digits is 7. What number am I? **6**	The number 59 and I are the only two prime numbers between 50 and 60.Who am I? **7**	I am the least common multiple of two numbers whose sum is 20. One number is 4 greater than the other. What number am I? **8**	Use two prime numbers to create a fraction that is equivalent to $\frac{21}{49}$. **9**	One-half of a number added to one-fourth of 96 is 30. What is the number? **10**	**Summer Home Work for FUN**
$4\frac{5}{12} - 2\frac{9}{16}$ **12**	$\frac{2-\frac{3}{4}}{6\frac{1}{4}+\frac{1}{2}}$ **13**	Which is the better buy: One gallon of milk for \$1.99, or $\frac{1}{2}$ gallon of milk for \$0.98? **14**	Tell if each pair of ratios is proportional. 5 to 8, 15 to 32 ; 20:12, 15:9. **15**	Combine like terms to Simplify algebraic expression. 13x+6+9y-10+7x-y. **16**	I am a three-place decimal that is equivalent to the difference between 1 and $\frac{3}{8}$. What decimal am I ? **17**	
Write $\frac{2}{5}$% as a fraction and decimal **19**	What is 20% of $\frac{2}{5}$ of 15 **20**	A rug cost \$296 plus $6\frac{1}{2}$% sales tax. Find the sales tax and the total cost. **21**	After a discount of 15%, the price of a shirt is \$51. What was the original price of the shirt? **22**	Solve inequality and graph solution. 2n+11>15 **23**	Find the distance between points (-2,8) and (7,8). **24**	
Make a dot plot of the cousins' ages. 10,9,10,14,5,10,11,16,10,16,14. **26**	Compare |-6| and -6 **27**	Order from greatest to least -2.4, $\frac{5}{8}$, $-\frac{5}{8}$, 0 **28**	Write 78,045 in expanded form using exponents **29**	The sum of my digits is 11. When rounded to the nearest hundred, I am 500. Rounding to the nearest ten makes me 530. What number am I? **30**	Evaluate the expression $2\{5[12 + 5(500 - 100) + 99]\}$ **31**	

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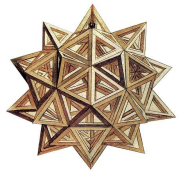
August **5 → 6** **Monday 2**	Average **Tuesday 3**	Mean Median Mode **Wednesday 4**	Operations with integers **Thursday 5**	Equation **Friday 6**	Expression **Saturday 7**	**Incoming 6th Grade**
Exponent Base Power **9**	Order of operation **10**	Coordinate plane Ordered pair Quadrant Origin **11**	Box Plot (Box-and-whisker Plot) **12**	t-table Linear equation **13**	Angle Acute angle Obtuse angle Right angle Straight angle **14**	**Summer Home Work VOCABULARY**
First Quartile Third Quartile Interquartile Range **16**	Frequency Table **Histogram** **17**	Triangle Classify the triangles by sides and angles **18**	Sum of all angles of a triangle **19**	Perimeter Square Rectangle **20**	Area Rectangle Perimeter **21**	
trapezoid parallelogram rhombus square rectangle **23**	Similar triangles Corresponding sides **24**	Perimeter Area **25**	Parallelogram Area Perimeter **26**	Surface area Area of a square **27**	Circle Radius diameter Circumference **28**	
Area of a circle **30**	Volume Rectangular prism Base Height **31**					

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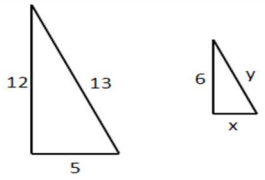
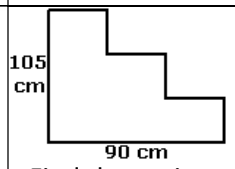
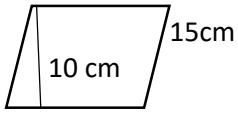
August **5 → 6**	Marcy's average score on four tests was 84. Three of scores were 84, 88, and 80. What was the fourth score?	Find the mean, median, and mode of a data set. 17,15,28,20,15,26	Find the probability of getting a sum of 5 or a sum of 7 when two cubes are tossed.	Solve $x + (-21) = -59$	Evaluate $x - (-2)$ for $x = 3$	**Incoming 6th Grade**
$3^2 + (-5)^2 - (-1)^3 = ?$ **Monday 2**	**Tuesday 3**	**Wednesday 4**	**Thursday 5**	**Friday 6**	**Saturday 7**	
Compare -7^2 and $(-7)^2$ **9**	$\frac{-5^2 + (-5)^2}{\lvert 4^2 - 2^5 \rvert - (-3)}$ **10**	Draw a coordinate plane. Graph and label the points given. (0,5), (–3,1), (–1,0) (–4, –5) **11**	Draw a box-and-whisker plot for these scores 10,15,20,20,30,30, and 40. **12**	Make a T-table. Then graph each equation. Y = 2x-4 Y = x/2+3 **13**	From midnight to noon, the hands of a clock form straight angles several times. How many times? **14**	**Summer Home Work for FUN**
Find range and interquartile range for this set of data. 10,2,5,6,7,3,4 **16**	Do frequency table and histogram for this data set. 6,11,9,13,18,15,21, 15,17,24,27,12. **17**	Is it possible to make an equilateral obtuse triangle? Explain. **18**	Find the third angle of a triangle, given that the first two angles are 55° and 70°. What kind of triangle is it? **19**	Find the area of the square which has the same perimeter as a rectangle 12 by 2. **20**	What is the greatest area of a rectangle with a perimeter of 50? **21**	
True or false. All trapezoids are parallelograms. Every square is a rhombus. Every rectangle is a square. **23**	 x = y = **24**	 Find the perimeter . **25**	 20cm Area = ? Perimeter = ? **26**	Find the surface area of a cube with edge of 3.2 meters. **27**	If circumference of a Ferris wheel is 314 meters, what is its diameter? Use 3.14 for π. **28**	
What is the area of a circular garden with a diameter of 4 feet? **30**	An aquarium has a rectangular base 25 in by 12 in. its volume is 6900 in^3. Find its height. **31**		**Check everything you solved and prepare your questions for teacher.**