# Big Apple Academy 2018 Mathematics Department

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**Grade 3**  **4 Summer Homework Math Package**

It is important that you keep practicing your mathematical Knowledge over the summer to be ready for **4th grade**. In this Package you will find a calendar of activities for the month of July and August.

What should you do?

* Take a 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 or just give examples instead. You can also draw pictures for illustrations.
* Use the internet to find the meaning of each word you do not know

[www.a**mathsdictionaryforkids**.com/**dictionary**.html](http://www.amathsdictionaryforkids.com/dictionary.html)

* Solve the problem of the day and write the solution with full explanation on the next page
* Have the date of the entry. Have a clear and complete answer. Be neat and organized.

Do not forget to bring your notebook to school on the first school day.

**Have a Great Summer!!**

# Big Apple Academy Mathematics Department

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| July  **Monday** | **Tuesday** | | **Wednesday** | | **Thursday** | | **Friday** | | **Saturday** | | **Incoming 4th Grade** |
| Difference | Variable |  | Equation |  | Product |  | Properties of |  | Dividend |  |  |
| Sum Addends  Fact Families | Numerical and  Algebraic Expressions |  | Rounding  Estimation Overestimate Underestimate |  | Factors  Multiple |  | Multiplication  Distributive Property |  | Divisor  Quotient Remainder |  | **Summer Home Work VOCABULARY** |
| **2** |  | **3** |  | **4** |  | **5** |  | **6** |  | **7** |  |
| Units of Time Properties  of addition  **9** | Survey Data  Tally Marks | **10** | Pictograph Line Plot Bar Graph | **11** | Place value  Compatible numbers  **12** | | Diagonal convex concave  **13** | | Parallel perpendicular intersecting | **14** |  |
| Divisibility Rules | Divisibility Rules |  | Trapezoid Square Rhombus  **18** | | Solid Figures |  | Polygon |  | Point |  |  |
| 2,5,and 10 | 3,9 |  | Face |  | Side |  | Line |  |
|  |  |  | Edge |  | Vertex |  | Line Segment |  |
|  |  |  |  |  |  |  | Ray |  |
| **16** |  | **17** |  | **19** |  | **20** |  | **21** |
| Angle  Type of angles  **23** | Pairs of lines Name of Polygons  **24** | | Type of triangles  **25** | | Standard form of the number Expanded form Word form Period | **26** | Type of quadrilaterals | **27** | Types of polygons (pentagon, ...)  **28** | |  |



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| **July**  **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** |
| Write the rule for each pattern and write the next number  6, 12, 18, 24, \_  7,15,12, 20,17,\_  **2** | Dan collected 435 stamps. He gave away 187 of them. How many stamps did he have left?  **3** | 1. 7 + r = 28 r=?  2. 608 – 329  3. 567 x 24  4. 2917 / 4  **4** | 21 games were bought for Children’s Hospital. Each game cost $6. How much money was spent in all?  **5** | Maria bought a shirt for  $19.50 and pants for  $18.95. He got $1.55 change. How much money did she have?  **6** | factors of 34 are First 5 multiples of 34 are 47–k=30  9842 / 6  8x6 + 24/8  **7** |
| Write the rule for each pattern and write the next number 6,13,27,55  5,13,29,61  10,17,24,31 **9** | How many: Feet in 3 yards  Quarts in 4 gallons Ounces in 7 pounds  **10** | 612/5  597x77  345x253  estimate each result  to check  **11** | Mira has 18 rose bushes in her garden. Each spring, each bush has about 11 rose blooms. About how many rose blooms will Mira have?  **12** | Fred is collecting shells on the beach. If he finds a shell every three steps that he takes, how many shells will he find after 30 steps?  **13** | Marie is going across the monkey bars at school. There are 16 bars on the monkey bars. If she starts with the first bar and skip two bars each time she swings, how many bars will she touch in all? **14** |
| Jo and Jill are baking cookies. Each batch will make 18 cookies. They want to make enough so that each student can have 2. If there are 25 people, how many batches of cookies do they need to make? **16** | Bryan has six dogs that each eats one‐ half cup of food each morning. If he has 20 cups of food, how many days can he feed all his dogs?  **17** | Skip was counting his change and found that it totaled $6.73. He had 18 pennies, 14 quarters, and 2 half‐dollars, and 5 dimes. How many nickels did he have?  **18** | Sam has 20 coins, some of them are dimes and others are nickels. If the total is $1.55, how many dimes are there?  **19** | Every three steps, Norma and Kris would each throw one stone. If they each walked 90 steps, how many rocks were thrown into the river by both Norma and Kris?  **20** | Betsy has 2 piles of clothes in her bedroom. There are 15 pairs of pants, 12 shirts. If the washing machine will hold only 4 shirts and 3 pairs of pants at one time, how many loads of laundry will Betsy have to do to clean all of her clothes? **21** |
| What shape has four sides and one pair of opposite sides that are parallel?  How many edges does a cube have?  How many equal sides does a  scalene triangle have?  **23** | Marcia is 2 years older than Rosa. Rosa is 3 years older than Lisa. Lisa is 2 years younger than her 11‐ year‐old brother. How old is Marcia?  **24** | Ben played basketball for 3 months and made 73 baskets. In February he made 20 baskets and twice that number in March. How many did he make in January?  **25** | 1. Simplify:   22 – 3 + (8 –1)x4=   1. Find: 338 x 46 =   **26** | 6,327/9  256x48  67–8.56  3.19x2.8 **27** | Draw angles 30, 75  160, 47 degrees  What part of your angles are obtuse? |

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| **August**  **3**  **4**  **Monday** | **Tuesday** | | **Wednesday** | **Thursday** | **Friday** | **Saturday** | | **Incoming 4th Grade** |
| Line of Symmetry Perimeter  Area | Area of rectangles Congruent shapes Rectangular Prism | | Fraction Numerator Denominator  **1** | Equivalent Fractions  Rules to compare fractions  **2** | Prime and Composite Numbers Common Factors Simplest form of fractions  **3** | Mixed Number Improper fraction Pictographs  **4** | | **Summer Home Work VOCABULARY** |
| Customary Units of Length  Inch Feet Yard Mile  **6** | Customary Units of Capacity  Cup Pint Quart Gallon  **7** | | Customary Units of Weight Ounce  Pound  **8** | Decimals Place Value Tenths Hundredths  **9** | Compare Decimals Equivalent Decimals  **10** | Metric Units of Length | **11** |  |
| Metric Units Of Capacity  **13** | Mass and Metric Units  **14** | | Cube cone  Sphere cylinder  **15** | Line plot  Bar graph  Scale Interval  **16** | Money  Names of Coins  **17** | Order of Operations | **18** |  |
| Problem‐Solving Strategies  **20** | Temperature: units and important numbers | **21** | Regrouping  **22** | Even Numbers Odd Numbers Counting Numbers Whole Numbers  **23** | Change  Unit Fractions  **24** | MeasuringTools  **25** | |  |

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| **August**  **3**  **4** grade  **Monday** | | **Tuesday** | **Wednesday** | | **Thursday** | | **Friday** | | **Saturday** | **Incoming 4th Grade** |
|  | |  | A tractor weighs 5 | | Mike bought 2 pounds of chocolate. His coworkers ate 21 ounces of it. How much chocolate does Mike have left?  **2** | | Two thirds of the dogs | | Compare 7tenths and 2fifths  Compare 8 sixteenths and 1eigths  Compare 9tenths and 1half  **4** |  |
| tons. How many  pounds is this? Write in order from | | were brown and one  sixths was black. Were there more brown or | | **Summer**  **Home** |
| shortest to longest:  2000 dm, 2 m, 2000 | | black dogs?  Write as a mixed | | **Work for** |
| cm, 2 km. | **1** | number: 125 / 4 | **3** | **FUN** |
| Mandy served salads. | | Luis sold 10 one‐gal cartons of milk and 36 one‐qt cartons of milk. Did he sell more milk in gallon or quart cartons?  **7** | A plane leaves Miami at 12:09 p.m. and lands in NY at 2:12  p.m. The flight was supposed to take 1hour52min. Was the plane on time?  **8** | | Find: |  | Pizzas are to be cut into 8 slices. How many pizzas are needed to serve one slice to each of 185 people?  **10** | | On Monday the |  |
| There were 5 tomato | | *3/5 of 45* |  | cafeteria serves either |
| slices on each. How | | *7/8 of 32* |  | spaghetti or lasagna |
| many salads did she | | *4/7 of 28* |  | with either milk or |
| Serve with 120slices? | | *¾ of 24* |  | juice. The dessert is |
|  | | *5/6 of 54* |  | either peaches or pears. |
|  | |  |  | How many combinations |
| can be served? **11** |
| **6** | |  | **9** |  |
| Napkins came in a box of | | Sue’s guests finished 2 gal of punch. If each guest drank 1 cup of punch, how many guests did she have?  **14** | Jodi worked 5 weeks an  4 days this summer. Blair worked 41 days. Who worked more days?  **15** | | dPedro made a domino chain 132 in long.  Muni made one 16 feet long. Whose chain  was longer? By how  many inches?  **16** | | Jim is 4 times older than Kate, who is 3 years younger than Will.  How old is Jim if their combined age is 51 years?  **17** | | A bread recipe calls for |  |
| 500. How many people | | 5 cups of white flour |
| could use 3 napkins | | and 1¼ cups of rye |
| each? How many more | | flour. How much more |
| would be needed for | | white than rye flour is |
| another person? | **13** | needed? 18 |
| Of the 12 boys in the | | The fish tank has 12 goldfish. Sarah and Jim were each allowed to take home ¼ of the fish. How many fish were left in the tank?  **21** | How many 2‐digit | | The length of a rectangular floor is 12ft. Its perimeter is 42ft. What is the area of the floor?  **23** | | Kat’s backyard is | | |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | |  |  |  |  |  |  |  |  |   7 X 8  All marks are equally spaced.  Find X.  **25** |  |
| class, 2/6 has blonde | | numbers have at | | rectangular with area | |
| hair, 1/12 has red hair, | | least one digit 4? | | of 50 sq yd. The width | |
| and the rest have brown | | What is the perimeter | | is 5 yd. How many | |
| hair. How many boys in | | of a rectangular with | | yards of fence does Kat | |
| the class have brown | | a width of 8m and a | | need to put around the | |
| hair? | **20** | length of 17m? | **22** | backyard? | **24** |