Maryland Math Month April 2016 - Middle School

| Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
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| www.marylandmath.org |  |  |  |  | 1 Think of seven jobs adults have in which they need to use math. | 2 Is the relation between players on a basketball team and their heights a function? |
| 3 If $3 x+5=23$, find the value of $9 x-12$. | 4 If 5 is a factor of a number, what is the probability that the digit in the ones place is a 5 ? | 5 Lisa bought a radio on sale for \$70. If the original price was $\$ 99.99$, what is the percent of discount? | 6 How far away from a 17 ft . tall house would the base of a 25 ft . long ladder be if the ladder extends 3 ft . beyond the roof of the house? | 7 A set of six mystery numbers has a mean of 1 and a mode of 1 . The range is 0 . What are the numbers? | 8 The length of a rectangle is 4 times the width. The perimeter is 70 cm . Find the dimensions of the rectangle. | 9 MaryAnn needs to build a fence around a garden that is 25 feet by 45 feet. The posts are to be set 5 feet apart. How many posts will she need? |
| 10 Find the radius, diameter, and area for a circle whose circumference was 24 cm . | 11 Name three consecutive numbers whose sum is 144 . | 12 Look around your house. Find five transformations. Lis $\dagger$ which type they are. | 13 The Drama Club sold 330 tickets to their spring production. Advance tickets were $\$ 5.00$ and tickets at the door were $\$ 7.50$. If the Drama Club collected $\$ 1980.00$, how many tickets did they sell at the door? | 14 If Mr. Romero has 14 black markers, 10 blue markers, 8 red markers, and 7 green markers in a drawer and selects one marker at random, what is the probability that marker is red. | 15 Predict the number of times you can write mathematics in one minute. Try it. Was your prediction correct? | 16 Use the sales papers for a grocery store. Make a grocery list for your family including how much the groceries will cost. |
| 17 Use toothpicks and marshmallows to construct three dimensional shapes. Can you name them? | 18 Family fun! Find the height of each member of your family. Find the mean, median, mode, and range of this data. | 19 Find the circumference and area of a circle with a radius of 4.5. Use 3.14 for pi. | 20 Find different cell phone plans and determine which would be the cheapest for your family based on current use. | 21 Explain the difference between a square and a rectangle to a grown up. Is a square a rectangle? Is a rectangle a square? | 22 Think of seven jobs adults have in which they need to use math. | 23 Look through a newspaper and make a list of all the ways numbers are used. |
| 24 In a triangle, angle one measures 90 degrees, angle 2 measures 35 degrees. What is the measure of angle 3? | 25 Bake something special as a family. Make sure to double the recipe so you have a double batch. How do you double measurements? | 26 Kelly bought an outfit for $\$ 66$. If the original cost was $\$ 84.50$, what is the percent of discount? | 27 Angelica and James leave their school at the same time. Angelica drives due east for five miles. James drives due north. They drive until they are 17 miles apart. How far did James drive? | 28 Mary is twice as old as Feodor. In 8 years their ages will total 70. How old is each now? | 29 Using all the digits 1, 3,4,6,7 make the largest 5 digit even number divisible by 3 . | 30 Look through a newspaper. List all the graphs and make a note of what they are used for. |

