

Rising Grade 6 Math

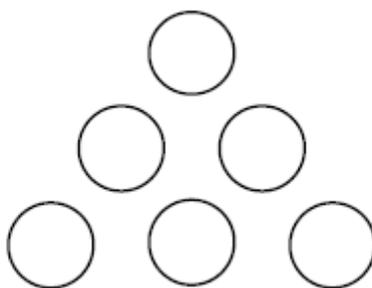
OPTIONAL Summer Enrichment Packet

You may choose to do as many or as few of these problems as you like. The goal of this packet is to provide an opportunity for you to reinforce and expand your mathematical reasoning. You are highly encouraged to work with others, including friends and family members.

If you have questions, I will be checking my work email about once a week from June 17th – August 16th. My email address is ghiltebrand@barrie.org.

Beginning August 19th, you should begin reaching out to the new math teacher, Ann Smith. Her email will be available on the school website.

1. Using each of the digits 1, 2, 3, 4, 5 and 6 once and only once, fill in the circles so that the sums of the numbers on each side of the three sides of the triangle are equal. Describe the strategy you used to find the solution.



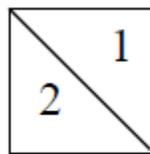
2. A rectangle has an area of 120 cm^2 . Its length and width are whole numbers.
 - a. List all the possible dimensions of the rectangle.
 - b. Which dimensions give the smallest perimeter?

3. The product of two whole numbers is 96 and their sum is less than 30. What are the possibilities for the two whole numbers?

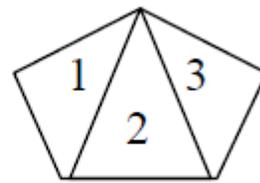
4. Draw the next three figures in this pattern:



3 sides



4 sides

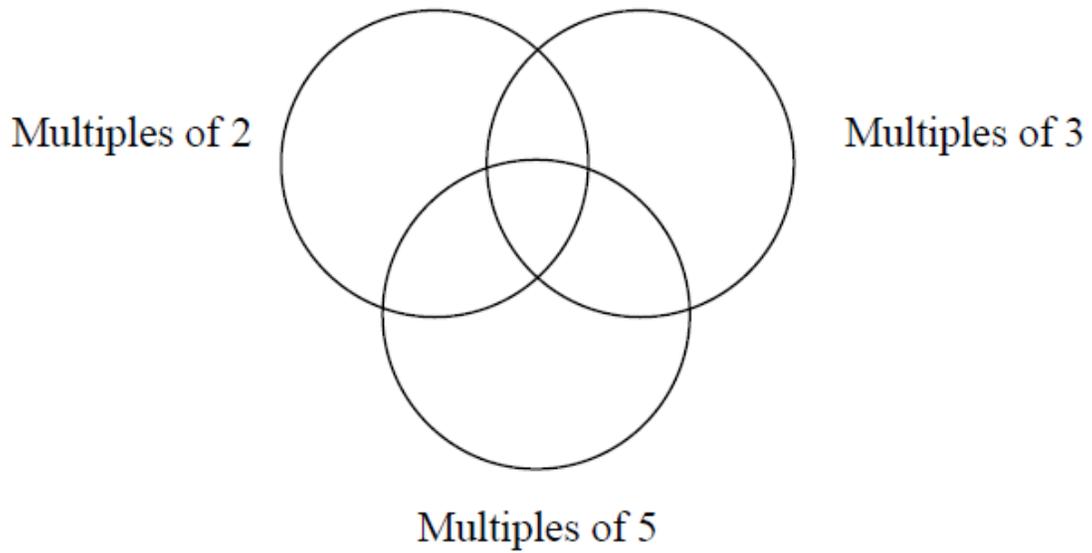
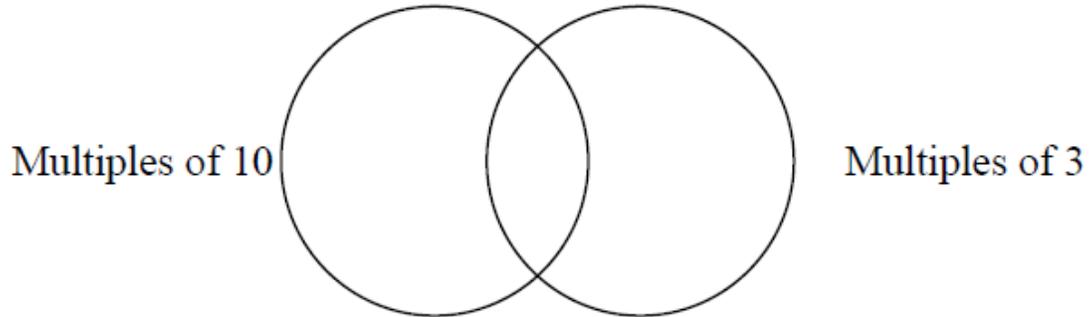


5 sides

- a. How many triangles are in a figure with 10 sides?

5. In a box of red, yellow and blue color chips, all but 4 are red, all but 4 are yellow, and all but 4 are blue. How many color chips are in the box altogether?

6. Write the numbers in each circle that are described by the attribute written outside the circle. Numbers in overlapping regions must meet the requirements of **each** circle.



7. Use the digits 0, 1, 2, 3, 4, 5, 6, 7 to find the smallest answer possible in this problem. No negative numbers are allowed.

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 - \quad \square \quad \square \quad \square \quad \square \\
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8. What is the greatest 3-digit number whose digits total 13? Justify your answer.
9. The biggest animal in the world is the blue whale. Some blue whales have grown as long as 109 feet and have weighed 150 tons. A baby blue whale gains about 200 pounds a day.
- How many pounds are in a ton?
 - How long will it take for a baby to weigh its first ton, if it was 400 pounds at birth?
10. Optional summer activity – Go to a museum that relates to math or science. Write a paragraph about something you found interesting at the museum.