

Math Challenge #8




First Name: _____	Last Name: _____	Grade: _____
Teacher: _____	Parent's email: _____	













Winter Math Puzzles






Welcome to Math Challenge #8. Math puzzles are fun to solve; these types of problems can give us great boosts in our math skills and problem solving skills.

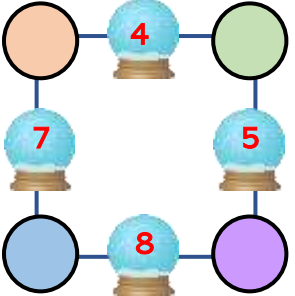
Kinder & First Grade: solve at least 3 problems.
Second & Third Grade: solve at least 7 problems.
Fourth Grade and above: solve at least 12 problems.





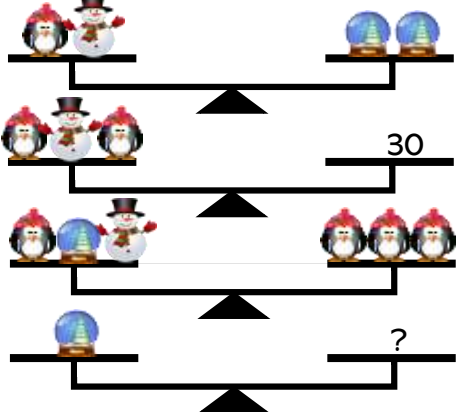
Answer

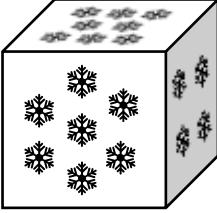
<p>1. Sanjana has a sheet of stickers (see picture). She used some snowman stickers. How many snowman stickers did she use?</p>		
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<p>2. This is an operation puzzle. Write down the correct operation (+ or -) in each box to make the sum correct.</p> <p>a.  □  □  = </p> <p>b.  □  □  = </p> <p>c.  □  □  = </p>	<p>a.</p> <p>b.</p> <p>c.</p>
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<p>3. If  +  = 9 and  +  = 4</p> <p> = ?</p>	
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<p>4. Write the digits 1, 2, 3 and 6 in the circles so that each number in the snow globe is equal to the sum of the two numbers in the circles that are directly connected to the globe.</p> <div style="display: flex; align-items: center; justify-content: center;">  </div>	<p><i>Orange circle = ____</i></p> <p><i>Green circle = ____</i></p> <p><i>Blue circle = ____</i></p> <p><i>Purple circle = ____</i></p>
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<p>10. Julie and Emma began to read the same 62-page book on Friday. Julie reads 11 pages a day while Emma reads 5 pages a day.</p> <p>a. On which day Julie will finish reading the book? b. How many full pages has Emma read by the end of the same day Julie finished the book?</p>		<p>a. b.</p>
<p>11. If there's one thing the Frost family enjoys, it's building snowmen. Today, they built a dozen of them. They put black hats on half of the snowmen. One third of the snowmen got red hats. After that, the Frosts ran out of hats. So, the rest are wearing wigs. How many snowmen are wearing wigs?</p>		
<p>12. My dad and I share the same birthday. We both were born on the last day of January. He is now five times older than me. How many years ago was it when I was two years old and my dad was 34? Hint: create a table or an organized list or work backwards</p>		
<p>13. Your friend, Koji, has written you a number code to break. It looks like this:</p> <p> = 11</p> <p> = 63</p> <p> = 45</p> <p>How would you write 87 using Koji's code using the fewest symbols?</p>		
<p>14.</p> 		

<p>15. Haruki was given a bag of jellybeans. He grabbed a handful out of the bag and counted how many he took out. He found that he had grabbed 20 less jellybeans than were left in the bag. Haruki then decided to count how many of each color of jellybean he had grabbed out of the bag. He counted 5 pink, 3 green, 4 red, 2 yellow and 1 orange. How many jellybeans were there originally in the whole bag of jellybeans?</p>	
<p>16. Jamal has a special snowflake cube, as seen on the right. Each face on the cube contains one of six unique consecutive numbers of snowflakes. The sums of the number of snowflakes on each of the three pairs of opposite faces are equal. What is the sum of the snowflakes on all faces on Jamal's cube? <i>Consecutive means following continuously, and when it comes to numbers, consecutive numbers are numbers that follow each other continuously in order. For example: 1, 2, 3, 4, ...</i></p>	
<p>17. Three numbers are in the ratio 2 : 3 : 4. The sum of their squares is 1421. What is the largest number of the three?</p>	
<p>18. On January 20, 2023, it was 42°F at 7 a.m. From 7 a.m. to 4 p.m., the temperature rose an average of 4°F per hour. From 4 p.m. on January 20 to 8 a.m. on January 21, the temperature dropped an average of 3°F per hour. What was the temperature, in degrees Fahrenheit, at 8 a.m. on January 21?</p>	

Solution is available on February 3, 2023
www.mathinaction.org