

Math Challenge #7







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

Winter

Winter, the coldest season of the year, is often associated with plunging temperatures and icy weather. However, its impact and timing changes according to location. The farther an area lies from the equator; the colder temperatures it experiences. Math problems in this challenge involve the winter season. Enjoy and don't forget to ask parents or siblings for help if you get stuck.


Kinder & First Grade: solve at least 3 problems.
 Second & Third Grade: solve at least 6 problems.
 Fourth Grade and above: solve at least 12 problems.

	Problems		Answer
1.	Josephine cut out 5 paper snowflakes. She wanted to decorate her room with 14 paper snowflakes. How many more snowflakes did she have to cut?		
2.	 Three inches of snow fell on Monday. Five inches of snow fell on Tuesday. Two more inches of snow fell on Wednesday than on Monday. How much snow fell during these three days?		
3.	Jeremy and Nora were playing out in the snow. They thought it would be fun to throw snowballs at the boys next door. They threw a lot of them before the boys figured out where they were coming from. Jeremy threw seven more snowballs than Nora. Nora threw nine snowballs. How many snowballs did Jeremy and Nora throw altogether?		
4.	Mrs. Holt and her sister drove to Snoqualmie Pass, which is 38 miles away. They drove 29 miles and then stopped for gas. She put 18 gallons of gas in the car. How many miles did they have left to drive to get to the Pass?		
5.	Last year, Buffalo, New York had 45 inches of snow in January. The year before, Buffalo had 19 inches of snow in January. This year, the weather channel predicted that Buffalo will have 5 inches more than last year's and the year before combined, for the month of January. How many inches of snow was predicted for January this year?		
6.	Anika is handing out candy canes at school. She started her day with 50 candy canes. She gave 19 to Mrs. Hewitt's class and 12 to the school office. How many candy canes does she have left?		
7.	Today's temperature in Seattle, Washington will be 39°F. Tomorrow's high will be 7 degrees warmer than today's. What will tomorrow's high temperature be in Fahrenheit?		
8.	Felicia had \$6.90 to buy treats for her class winter celebration. She wanted to buy a dozen mini cupcakes but she needed \$2.70 more to buy them. How much each mini cupcake cost?		

9. The power went out during the winter storm last night. When the power was restored, Lisa reset her digital clock to 12:00 midnight. At 9:35 a.m. on the same day, when the digital clock showed 3:50 a.m., the actual time was 9:35 a.m. At what time was the power restored?

10. There are twenty-seven students in Mrs. Hein's class. One-third of them have red jackets. One-ninth of them have blue jackets. How many of her students have jackets that are not red or blue?

11. Emma, Julia, and Nicole spent a total of \$1649 for their ski trip. Emma and Julia each spent an equal amount of money while Nicole spent \$304 less than Julia. How much did Emma and Julia each spend for the ski-trip?

12.  There was frost on my window when I got up this morning. The weatherman on television said it was negative four degrees Celsius outside. It is warmer inside. The thermometer says it is twenty-two degrees Celsius inside. How many degrees colder is it outside?

13. Capital City is preparing for their annual winter festival. They plan to decorate their park with 159 strings of lights and each string of lights has 25 bulbs. It is expected to take 15 hours to decorate over the course of the week. How many lights are going to be hung each hour?

14. Ron set his digital timer to count down from 5 minutes (5:00) to 0:00 one second at a time before the year turned to 2017. For how many seconds did at least one of the three digits show a 2?

15. One hundred students were asked their opinion on three activities during winter. 65 said they like downhill skiing/snowboarding, 75 said they liked sledding, and 85 said they like building snowmen. What is the fewest number of students that could have said they like all three activities?

16. Henry spent \$750 of his monthly salary on a snowboarding trip and $\frac{3}{5}$ of the remainder on a Go Pro camera. He is now left with $\frac{1}{4}$ of his monthly salary. How much did he earn in a month?

17. Glenda wanted to buy her first snowboarding equipment. If the snowboarding equipment she wanted was sold at a discount of 15%, she would need \$80 more than she had. If the equipment was sold at a discount of 20%, she would have \$120 left. How much money did Glenda have?



18. A local artist made snowflake shapes out of wires. She cut a wire into two pieces. The longer piece is 147 cm longer than three times the shorter piece. The length of the shorter piece is $\frac{2}{11}$ of the total length of wire. What is the length of the longer piece?