

# Math Challenge #7

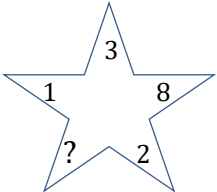




First Name: _____	Last Name: _____	Grade: _____
Teacher: _____	Parent's email: _____	

## Winter

Here are more math problems with winter theme. Enjoy the challenge!

**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.**

<i>Problems</i>		<i>Answer</i>
1.	Andrew used huskies to pull his dog-sled. He left his village with 8 dogs pulling his sled. Along the way, he met his friend Simana. She had caught so many fish that day that her team of dogs couldn't pull the sled, so Andrew lent her 3 dogs. How many dogs did Andrew have left to pull his sled?	
2.	<div style="display: flex; align-items: center;">            What number is missing on the star so that the sum of all numbers is 19?         </div>	
3.	Kirill got a square box with 16 chocolate pieces in it for Christmas. It was neatly arranged in 4 rows of 4. On Christmas day, he ate every piece of chocolate along the sides of the box. How many chocolate pieces are still in the box? 	
4.	On December 15 <sup>th</sup> , Bellevue Ice Skating Arena was open from 2:30 p.m. till 11:00 p.m. How many hours was it open that day?	
5.	For the holiday party, Mr. Bing brought 80 cookies and gave his class of 28 students each 2 cookies. He later gave some of the remaining cookies to the school office and had 5 left for himself. How many cookies did he give to the school office?	
6.	Owen bought 8 candy canes. He gave the cashier \$2. He received change of a quarter, a dime and a nickel. What is the cost of each candy cane?	
7.	Each day, a new row with an alternating pattern is added to the bottom of a Christmas tree. The tree will have the shape shown in the picture on the third day. How many green triangles will be in a tree at the end of the first week? 	
8.	Anna, John, Sarah, Carl, and Tim all made the finals of the National Winter Math Tournament last year. Before the final round began, each one had to shake hands with all the others. How many handshakes were there?	

9. Julie uses  $\frac{1}{4}$  of package of icing to decorate Christmas cookies. She then uses  $\frac{1}{9}$  of the remaining icing for decorating a gingerbread house. What fraction of the package of icing does she have left?



10. Bellevue Ice Skating Arena has the following prices: \$14 for 9 years old and above, \$10 for 8 years old and under. A party of 7 paid a total of \$86. How many kids were 8 years old and under in this party?

11. When throwing snowballs at each other Jaiden had an accuracy of  $\frac{7}{15}$ , Ben's was  $\frac{3}{4}$  and Kevin's was  $\frac{6}{12}$ . Out of the three boys who was missing the targets the most?

12. If an average 4 inches of snow fell every 5 days, how much snow in inches would have fallen during the months of December-February, assuming it's not a leap year?

13. Areeb went for a 5-mile cross-country jog. He finished his first 2 miles in 30 minutes and the rest of the way in 45 minutes. What was Areeb's average speed in miles per hour for this jog?



14. Speed skiing is a sport where skiers race downhill in a straight line as fast as they can. The current record holder is Simone Origone with the speed of 156.8 mph. Racing car Hennessey Venom F5 is claimed to have a speed of 301 mph. How much faster is Venom F5 than the fastest speed skier in miles per hour?

15. Jessica bought a scarf for her mother. The scarf was on sale for  $\frac{1}{3}$  off the marked price. The regular price of the scarf was \$36.00. How much will she pay for the scarf, including sales tax of 6%?



16. A snowplow truck can clear 1 mile stretch of 1 lane road in 15 minutes. How long will it take to clear 4 lane Snoqualmie Pass 30 miles long?

17. The Winter Olympics will be hold in PyeongChang on February 9-25, 2018. In 2014, there were 2,875 participants. For the 2018 Winter Olympics, they estimate a 20% increase in participation compared to 2014. How many participants are planning to compete at Winter Olympics 2018?

18. Peter walked to and from school on  $\frac{3}{5}$  of the school days in one winter month. He took a school bus to and from school on  $\frac{7}{8}$  of the remaining days. On the one remaining school day they had a field trip, but he couldn't go, because he was sick. What is the name of this winter month?