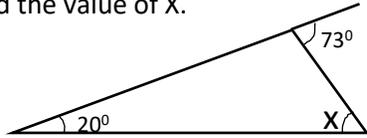
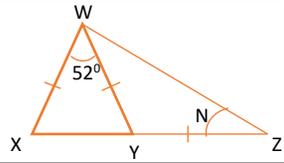


Gr 6 Practice

		Answers	Score
1.	If you know that $3.424 \div 1.07 = 3.2$ What is the result of $342.4 \div 0.00107$ ?	1. 320000	
2.	If a calendar reminder on your computer is written as a nonstop word: <b>MATHCHALLENGEMATHCHALLENGEMA...</b> What would be the 75 <sup>th</sup> letter?	2. E	
3.	Egor's little brother is making numbers from sticks from 0 to 9, as shown. What 2-digit number can you make, using the largest number of sticks?	3. 88	
4.	Find the smallest of five consecutive numbers whose sum is 100.	4. 18	
5.	What is the least prime number that is the sum of 3 different prime numbers?	5. 19	
6.	It's a President's Day Sale! The JC Penney store put all of its winter coats on sale for 40% off. One rack has a sign saying, "Take an additional 20% off". Thomas picks out a Columbia coat from this "20% off" rack. If the coat had an original price of \$179.00, what will the coat cost now? (Do not include tax.)	6. \$85.92	
7.	A slow clock is set correctly at 8:00 AM, and loses 3 minutes every hour. When the slow clock next reads 7:00 PM, what is the correct time?	7. 7:33 p.m.	
8.	The ratio of boys to girls on the math team is 5 to 2. If they can get six more girls to join, the ratio of boys to girls would be ten to six. How many kids are currently on the math team?	8. 42 [kids]	
9.	In the five-digit number <b>A6A41</b> , each of the As represents the same digit and <b>A6A41</b> is divisible by 9. What digit does A represent?	9. 8	

10.	What number multiplied by itself is equal to the product of 32 and 162?	10. 72	
11.	This year, 1 out of every 55 students bought a new smart phone. This rate represented an increase of 20% over last year's rate of 1 new smart phone out of every N students. Find N.	11. 66	
12.	How many different triangles can be formed that have whole number side lengths, have a perimeter of 30 units, and have one side of 12 units long?	12. 6 [triangles]	
13.	For each dollar Brandt earns, he puts a quarter and a penny in the bank. If he has earned \$83, how much money, in dollars, has he put in the bank?	13. \$21.58	
14.	Find the value of X. 	14. 53°	
15.	WXZ is a triangle. WX = WY = YZ. Find the value of N. 	15. 32°	
16.	The date 02-04-06 (February 4 <sup>th</sup> , 2006) consists of three consecutive even numbers in increasing order. This is the first date with this feature in the 21st century. Including the date given as an example, how many dates expressed in the form mm-dd-yy have this feature in the 21st century?	16. 6 (02-04-06, 04-06-08, 06-08-10, 08-10-12, 10-12-14, 12-14-16)	
17.	Twice my favorite number is one-hundred-two less than five times my favorite number. What is my favorite number?	17. 34	
18.	Six consecutive whole numbers are each divided by 6. Find the sum of the resulting six remainders.	18. 15	

Gr 6 Practice

19.	The figure on the right is a semicircle in a square. The length of each side of the square is 16 in. What is the area of the shaded part? (Take $\pi = 3.14$ )		19.	18.24 [in <sup>2</sup> ]		
20.	If all of the whole numbers from 1 to 1000 inclusive are written down, which digit appears the smallest number of times?		20.	0		
21.	What is the mean of $\frac{2}{3}$ and $\frac{4}{9}$ ?		21.	$\frac{5}{9}$		
22.	There are 33 bumble bees and 9 honey bees on a flowering fruit tree. Every 10 minutes, 6 new bumble bees and 12 new honey bees come to the tree. Find the time, in minutes, when there will be an equal amount of bumble bees and honey bees in the tree.		22.	40 [min]		
23.	Water increases in volume by 5% when frozen. I pour 400 cubic centimeters (cc) of water into a container that holds 425 cc. I then freeze this water. What is the empty volume remaining in the container, in cubic centimeters?		23.	5 [cc] or 5 [cubic cm]		
24.	A calendar page for a 31-day month is laid out as usual with 7 columns labeled Sunday through Saturday, and with as many rows as needed for that month. What is the largest possible value for the sum of the numbers in a single column of the calendar?		24.	85		
25.	Manny decided to mark everything down in his store by 10% during the winter sale event. However, it didn't stimulate sales so he marked everything down another 20%. What is the overall % mark down?		25.	28%		
<b>TOTAL SCORE</b>						

## MATH CHALLENGE TOURNAMENT 2015

### Individual Challenge – Grade 6

Sponsored By Ellipsis Academy

FINAL SCORE:

**KEY**

Name: \_\_\_\_\_

Team#: \_\_\_\_\_

#### *Individual Challenge (40 minutes)*

- You may use scratch paper to do any calculations you need to reach your final answers.
- Write your answers in this test booklet.
- All fraction answers must be reduced.
- Units are not necessary. If you choose to label your answer, please make sure you write the correct unit. A correct answer with an incorrect unit will be marked as an incorrect answer.