

Grade 6 Practice

		Answers	Score
1.	Fill in the blank: $1111 + 2222 + 3333 + 4444 = 2222 \times \underline{\hspace{2cm}}$	1. 5	1 1
2.	To open a safe you enter 3 digits that are different. How many combinations can you make using only 2, 3 and 7?	2. 6	
3.	What is $5 + 8 \times 3 + 1 + \sqrt{9}$	3. 33	
4.	How many feet does Marshawn Lynch run if he runs 13 yards?	4. 39 [feet]	1 1
5.	What is the value of $1/2$ divided by $1/4$?	5. 2	1 1
6.	What is the area of a circle with diameter 10? Express our answer in term of π .	6. 25π	1 1
7.	How many two digit numbers are there, which can be expressed only by using different even digits?	7. 16	1 1
8.	Find the missing factor: $20 \times 30 \times 40 = 2 \times 4 \times 6 \times \underline{\hspace{2cm}}$	8. 500	1 1
9.	How many lines of symmetry does a regular hexagon have?	9. 6	1 1
10.	A right triangle has a hypotenuse of length 13 inches and one leg of length 5 inches. How many inches is the other leg?	10. 12 [inches]	1 1
11.	Artem is 10 yrs. old. His father is 4 times as old. How old will his father be when Artem is twice as old as he is now?	11. 50	1 1
12.	Adrian is traveling on I-405 at a rate of 55 miles per hour. At this rate, how many hours will it take for Adrian to travel 330 miles?	12. 6 [hours]	1 1
13.	The ratio of two complimentary angles is 2:1. What is the larger angle in degrees?	13. $60^{[0]}$	1 1
14.	If Daniel runs 3.2 miles a day, how many miles will he do in 2 weeks if he takes 2 days off every week?	14. 32 [miles]	1 1
15.	What is the next number in the series 3, 9, 21, 45, $\underline{\hspace{2cm}}$?	15. 93	
16.	What is 5% as a reduced fraction?	16. $1/20$	1 1
17.	Basil received a t-shirt, which had the 2015 on the front. What did he see in a mirror?	17. 2105	1 1

18.	What is the sum of the 3 smallest positive integers and the 2 largest negative integers?	18. 3	1 1
19.	Supposed it is now 4:00 pm. What time will it be in 245 hours?	19. 9:00pm	1 1
20.	Coffee costs \$32.88 for 6 pounds. How much does coffee cost per pound, in dollars?	20. [\$] 5.48	1 1
21.	Roy is 15 years older than Tina who is two-thirds the age of Roy. How old is Tina?	21. 30 [years old]	1 1
22.	What is the probability to draw a 2 of hearts or an ace from a standard deck of cards?	22. $5/52$	1 1
23.	What is the number of fingers, toes and noses on an eleven-player Seahawks team?	23. 231	1 1
24.	A rectangle has a perimeter of 28 cm and one side is 6 cm. How long is its diagonal?	24. 10 [cm]	1 1
25.	What fraction of an hour passed today between 11:09 am and 11:41 am?	25. $8/15$	1 1
26.	What is the volume of cylinder with the radius 3 and height 7? Express your answer in terms of π .	26. 63π	1 1
27.	How many minutes after noon is it when a 24-hour digital clock displays the correct time as 20:15?	27. 495	1 1
28.	How many vertices does regular octahedron have?	28. 6	1 1
29.	How many diagonals can be drawn in a regular nonagon?	29. 27	1 1
30.	Ada has 14 green, 8 blue and 6 yellow balls in a bag. Find the least number of the balls she has to take out of her bag to make sure that she took at least one ball of each color.	30. 23	1 1
31.	How many cups are in 3 pints and 2 gallons?	31. 38 [cups]	1 1
32.	What is the remainder when 149 is divided by 7?	32. 2	1 1
33.	Evaluate: $\frac{12}{35} \times \frac{7}{4}$	33. $3/5$	1 1
34.	What is the greatest prime factor of 10!	34. 7	1 1
35.	25% of my DVD collections are comedy and the rest are action. If I have 12 DVDs that are comedy, how many total DVDs do I have?	35. 48	1 1

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36.	The average of six consecutive odd numbers is 50. What is the least of these numbers?	36.	45	1 1
37.	Evaluate: $(100^0 - 90^0) \times (10^0 + 9^0)$	37.	0	1 1
38.	Alicia divides the number Y by 8 correctly and gets 0.25 as her answer. Benjie multiplies the same number Y by 8. What answer should he get?	38.	16	1 1
39.	Joe needs to buy some 44 cent stamps. What is the maximum number of 44 cent stamps can he buy with 2 dollars?	39.	4	1 1
40.	24 people are standing equally spaced in a circle, numbered 1, 2, 3, and so on. What number is on the person directly opposite person #7?	40.	19	1 1
41.	Which number is greater 3^4 or 2^6 ?	41.	3^4	1 1
42.	Evaluate: $12! \div 10!$	42.	132	1 1
43.	How many positive x satisfy the inequality: $x^3 \leq 51$?	43.	3	1 1
44.	How many positive integers are less than 10π ?	44.	31	1 1
45.	A snail moves 1 inch per 10 second. If it took him 3 min to cross the trail, what was the distance in feet he traveled?	45.	1.5 [feet]	1 1
46.	Toby has ostriches and llamas on his ranch. If there are 30 heads and 100 feet, how many ostriches are there on a ranch?	46.	10	1 1
47.	What is the greatest common factor of the number of months in a leap year and the number of days in a leap year?	47.	6	1 1
48.	4 boys are buying tickets to the cinema. In how many different ways could they line up?	48.	24	1 1
49.	A model of a house is built to a scale of 1:10. The original house has a height of 10 feet. How many inches tall is the model?	49.	12[in]	1 1
50.	A fair cubical die has the numbers 3, 3, 4, 5, 5, and 6 on its faces. What is the probability of getting 5 after one roll?	50.	$\frac{2}{6}$ or $\frac{1}{3}$	1 1
TOTAL SCORE				

MATH CHALLENGE TOURNAMENT 2015

GRADE 6 - MENTAL MATH

Sponsored By Ellipsis Academy

FINAL SCORE:

KEY

Name: _____

Team#: _____

Mental Math Challenge (10 minutes)

- You may not do any written work and only your final answers may be written.
- Any erasure or cross-out will result in the answer being marked wrong.
- Write your answers in this test booklet.
- Unit is not necessary. If you choose to label your answer, please make sure you write the correct unit. A correct answer with incorrect unit will be marked as an incorrect answer.