

# Math Wizardry

## Description

Math Wizardry is a problem solving competition that addresses eight content strands.

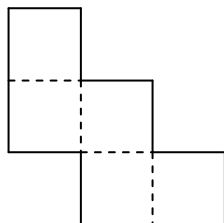
## Procedure

Student will read and solve the problems independently. Calculators will **not** be allowed.

## Sample

(This will not be an auditory competition but a written competition, using a black line copy in which the prompts are written.)

1. How many hours in the month of March
2. What number comes next in this series: 100, 92, 84, 76, \_\_\_\_\_?
3. What is the sum of the five prime numbers?
4. If a dollar bill was used to pay \$.57 purchase, what would be the least number of coins that can be used making change.
5. If the area of 18 sq. units, list all possible whole number perimeters.
6. If one bean weighs about 1 gram, about how many kilograms would 10,000 beans weigh?
7. What number comes next in this series:  $\frac{1}{4}$ ,  $\frac{1}{8}$ ,  $\frac{1}{16}$ , \_\_\_\_\_?
8. The length of the thighbone in your leg is about  $\frac{1}{4}$  of height. If you are 148 centimeters tall, about how long is your thighbone?
9. If your dinner bill totals \$13.81, and you leave a 15% tip, about how much change would you keep from a \$20.00 bill?
10. If you spend  $\frac{1}{8}$  of a day reading, how many hours is this?
11. If you fold the following figure along the dotted lines, would it form an open box?



12. Tossing 2 coins. What is the probably of not getting 2 heads?

13.  $3a$              $a =$   
 $\frac{*y}{238}$              $y =$

14. Using 2, 3, & 6 only once, and using any operation, create equations to each of the following numbers: 4, 9, 16.

15.             $5$              $30$              $500$             Find the number that equal A & B.  
 $\frac{x3}{A}$              $\frac{x A}{B}$              $\frac{-50}{B}$

16. Graph the following:  
 The number of games won by the different soccer teams.

	<b>Bears vs. Lions</b>		<b>Bears vs. Tigers</b>		<b>Lions vs. Tigers</b>	
<b>Scores of Game 1</b>	<b>3</b>	<b>4</b>	<b>2</b>	<b>3</b>	<b>3</b>	<b>5</b>
<b>Scores of Game 2</b>	<b>4</b>	<b>2</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>1</b>

17. What is the average weight of five students who weigh: 40 kilos, 38 kilos, 45 kilos, 41 kilos, and 36 kilos?

18. If school is in session from 9:00 a.m. to 3:00 p.m., How many hours a day would a child be out of school.

## Math Wizardry Answer Key

1. 744
2. 68
3. 27
4. 6
5. P = 18 units  
P = 22 units  
P = 38 units
6. 10
7.  $\frac{1}{32}$
8. 37 cm
9. Answer range \$4.10 to \$4.15
10. 3 hours
11. yes
12. 3 out of 4
13.  $a = 4$   
 $y = 7$
14. Answers can vary  
example –  $(6 \times 3) \div 2 = 9$
15. A = 15
16. Graphs might vary  
Bears won 1 game, Lions won 2 games,  
Tigers won 3 games
17. 40 kilos
18. 18 hours