# Super Bowl XLVI Pre-game Math Puzzle

Topics include factorials, logarithms, shapes, exponents, multiplication, and more.

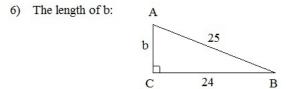
1) Log 10

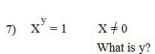


3) The additive identity

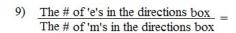


5) The least common multiple of 1, 3, and 9





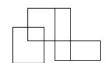
8) Middle digit of 22 x 33 x 44

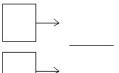


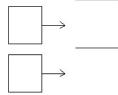
10) 
$$\frac{2^2+2}{2}$$
 =

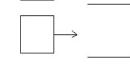
11) 
$$|-2-4|=$$

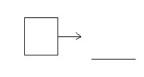
12) How many different quadrilaterals are in the figure?

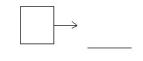




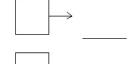


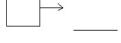


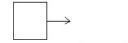


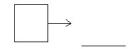


 $\rightarrow$	









Nash -Fibonacci Learning Center

Game Theory, Numbers, and elementary school math

> "Look over the quiz again." Practice, practice, practice."

Roman numerals and applications example: 46 XLVI



"I have a question about Sunday's assignment."





Mr. Canton 3rd Grade Math Pop Quiz



Joey Namath

What is the difference between 6 and 7?

An extra point

Express "one quarter" as a fraction.

15 minutes

1/4

Football game

Write five multiples of 6.

1 touchdown, 2 touchdowns, etc..

OK

or (6, 12, 18, 24, 30

What is the area of a rectangle with length 53 yards and width 10 yards?

53 x 10 = 530 sq yds the endzone

What is 12 out of 30?

12/30 = 40%

A bad passing day.

"NFL" Math Test

Fortunately, Mr. Canton was a football fan as well as a math teacher (with a sense of humor).

## Hidden Message

\* /

Letter Key:

0 1 2 3 4 5 6 7 8 9 A G E I M N O P R T

Clue: "Big Player"

Solve the twelve problems below. Then, convert the numbers to letters to reveal the answer!

### SOLUTIONS

1) Log 10 
$$\log_{10} 10 = X \implies 10^{X} = 10$$

$$X = 1$$

$$1 \mapsto G$$

$$\frac{6.5 \cdot \cancel{4} \cdot \cancel{3} \cdot \cancel{2} \cdot \cancel{1}}{5 \cdot \cancel{4} \cdot \cancel{3} \cdot \cancel{2} \cdot \cancel{1}} = \frac{6}{2} = 3$$

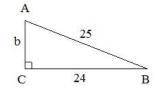
3) The additive identity zero.. 
$$X + 0 = X$$

$$0 \longrightarrow A$$

4) 
$$250\%$$
 of 2  $2.50 \times 2 = 5$ 

$$5 \rightarrow N$$





y = 0

$$b = 7$$

(7-24-25: 'special right triangle')
Pythagorean Theorem:



$$7^2 + 24^2 = 25^2$$

7) 
$$X^y = 1$$
  $X \neq 0$  What is y?

EX: 
$$X = 7$$
  
 $7^0 = 1$ 

$$0 \longrightarrow A$$

8) Middle digit of 
$$22 \times 33 \times 44 = 31944$$
 (the middle digit is 9)

$$9 \longrightarrow T$$

9) The # of 'e's in the directions box The # of 'm's in the directions box 
$$\frac{16 \text{ e's}}{2 \text{ m's}} = 8 \quad \text{(see above)}$$

two

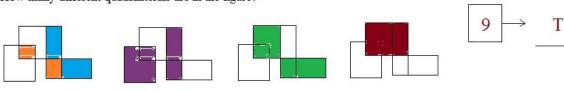
$$rac{8}{
ightharpoons} 
ightharpoons 
ighth$$

$$10) \qquad \frac{2^2 + 2}{2} = \qquad \frac{4 + 2}{2} = 3$$

$$3 \rightarrow I$$

11) 
$$|-2-4| = |-6| = 6$$

four



two

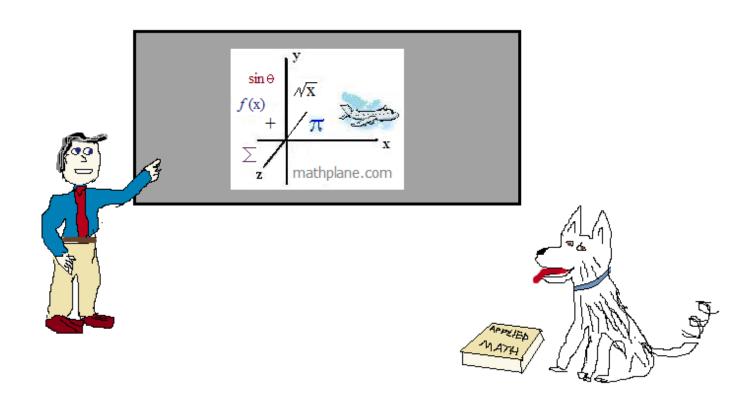
one

= nine

# Thanks for visiting!

If you have questions, suggestions, or requests, let us know.

# Enjoy



Find more puzzles, comics, and math resources at mathplane.com

