

**GRADE 12 ESSENTIAL
UNIT A – PROBLEM SOLVE
TEST OF GENIUS 2**

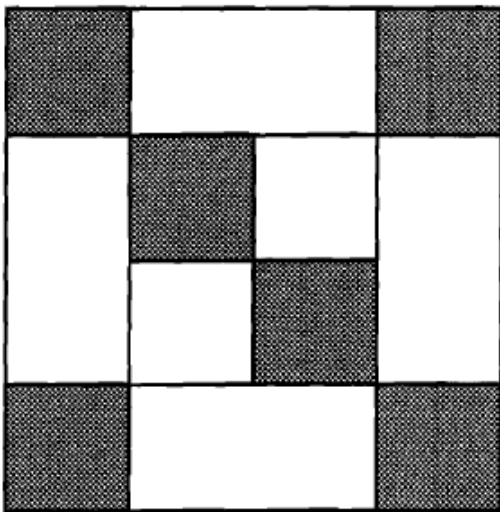
Name: _____
Date: _____

Test of Genius #2 Not for the Timid

Try a few of these if you are really bored; advanced ; optional
Maybe you **ARE** a genius. There are a variety of ways to solve each of these.

I do have an answer key somewhere if you are desperate, but I decline to look at it even myself!

1. How many squares can you count in this figure?



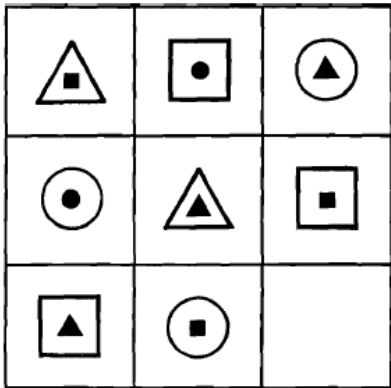
3. A math teacher drove by a playground that was full of boys and dogs. The teacher happened to notice that there was a total of 40 heads and 100 feet. How many boys and how many dogs were there?

2. Three stamps can be attached to each other in various ways. One way is shown here. In how many other ways might three stamps be attached?



4. What day followed the day before yesterday if two days from now will be Sunday?

5. What should go in the empty square?



7. How can you make change for \$1.00 using exactly fifty coins? (pennies allowed)

8. Replace A, B, and C with numbers so that:

$$A \times A = B$$

$$B - A = C$$

$$A + A = C$$

6. Place the digits 1 through 9 in the empty boxes in this figure so that the three rows across and the three columns down form correct arithmetic sentences. All calculations are performed in order from left to right or top to bottom.

(ie: **not** BEDMAS)

	\times		\div		$=15$
$+$		\div		\times	
	$-$		\times		$=24$
$-$		$+$		\div	
	$-$		$+$		$=3$
$=2$		$=15$		$=12$	

9. How can a baseball team win a game without a single man crossing home plate?

- 1) 18; 2) 5; 3) 30 boys, 10 dogs 4) Thursday 5) 6) Top 5,9,3
7) 1q, 2d, 2n, 45 p or 2d,8n, 40p 8) A3, B9, C6 9) girls or married men