QUOTABLE PUZZLE

Multiplying Polynomials

KEY

Directions: Solve the following problems. Match that answer to the correct letter of the alphabet. Enter that letter of the alphabet on the blank corresponding to the problem number.

$$\underset{3}{F}\ \underset{5}{i}\ \underset{9}{r}\ \underset{2}{s}\ \underset{7}{t}\quad \underset{11}{O}\ \underset{6}{u}\ \underset{7}{t}\ \underset{8}{e}\ \underset{9}{r}\quad \underset{5}{I}\ \underset{10}{n}\ \underset{10}{n}\ \underset{8}{e}\ \underset{9}{r}\quad \underset{1}{L}\ \underset{4}{a}\ \underset{2}{s}\ \underset{7}{t}$$

A	B	C	D	E	F	G	H	I
$3x^2 + 2x - 1$	$x^2 + 3$	$2x^2 - 12$	$x^2 - 78$	$x^2 + 9x - 36$	$x^2 + 7x - 78$	$3x^2 - 1$	$x^2 - 36$	$x^2 - 12x + 36$

J	K	L	M	N	O	P	Q	R
$x^2 + 36$	$20x^2 - 36$	$x^2 + 4x + 3$	$x^2 + 36$	$x^2 - 16$	$x^2 + 10x + 25$	$2x^2 - 25$	$2x^2 + 25$	$2x^2 - 5x - 25$

S	T	U	V	W	X	Y	Z
$2x^2 + 5x - 12$	$20^2 - 63x + 36$	$x^2 - 9x - 36$	$x^2 + 25$	$x^2 + 16$	$2x^2 - 5x + 12$	$3x^2 + 1$	0

1. $(x+3)(x+1)$ $x^2 + x + 3x + 3$
   $\boxed{x^2 + 4x + 3}$
   L

2. $(2x-3)(x+4)$ $2x^2 + 8x - 3x - 12$
   $\boxed{2x^2 + 5x - 12}$
   S

3. $(x+13)(x-6)$ $x^2 - 6x + 13x - 78$
   $\boxed{x^2 + 7x - 78}$
   F

4. $(3x-1)(x+1)$ $3x^2 + 3x - x - 1$
   $\boxed{3x^2 + 2x - 1}$
   A

5. $(x-6)^2$ $\boxed{x^2 - 12x + 36}$
   I

6. $(x-12)(x+3)$ $x^2 + 3x - 12x - 36$
   $\boxed{x^2 - 9x - 36}$
   U

7. $(4x-3)(5x-12)$ $20x^2 - 48x - 15x + 36$
   $\boxed{20x^2 - 63x + 36}$
   T

8. $(x-3)(x+12)$ $x^2 + 12x - 3x - 36$
   $\boxed{x^2 + 9x - 36}$
   E

9. $(2x+5)(x-5)$ $2x^2 - 10x + 5x - 25$
   $\boxed{2x^2 - 5x - 25}$
   R

10. $(x-4)(x+4)$ $\boxed{x^2 - 16}$
    N special case

11. $(x+5)^2$ $\boxed{x^2 + 10x + 25}$
    O