Math 10 100% Quiz Name KEY

Name the coefficient(s): $6x + 2y - z$ 6 and 2 and -1	Name the variable(s): $5x - 2y$ x and y	Name the constant(s): $3x - 5$ -5
Simplify: $3x - 5 + 2x - 3$ $5x - 8$	Simplify: $x^2 - 3x + 5x - 3x^2$ $-2x^2 + 2x$	Simplify: $10a - 3b - 10a + 4b$ b
Add: $(3x + 5) + (7 - 2x)$ $x + 12$	Add: $(3 + 5x) + (7 - 2x)$ $3x + 10$	Add: $(3x + 5y + 7) + (7y - 2 + 3x)$ $6x + 12y + 5$
Subtract: $(3x + 5y) - (-2 + 3x)$ $3x + 5y + 2 - 3x$ $5y + 2$	Subtract: $(3x + 5y) - (2y + x)$ $3x + 5y - 2y - x$ $2x + 3y$	Subtract: $(3x + 5y + 10) - (2y - 7)$ $3x + 5y + 10 - 2y + 7$ $3x + 3y + 17$
Expand: $2(3x + 5y + 10)$ $6x + 10y + 20$	Expand: $2x(3x - 5y - 10)$ $6x^2 - 10xy - 20x$	Expand: $-x(3x - 10)$ $-3x^2 + 10x$

Expand: $(x-4)(3x-10)$ $3x^2-10x-12x+40$ $3x^2-22x+40$	Expand: $(x-3)(x+10)$ $x^2+10x-3x-30$ $x^2+7x-30$	Expand: $(2x-3)(x+1)$ $2x^2+2x-3x-3$ $2x^2-x-3$
Expand: $(x-4)(x^2+x+5)$ $x^3+x^2+5x-4x^2-4x-20$ x^3-3x^2+x-20	Expand: $(x-3)(x^2+2x-4)$ $x^3+2x^2-4x-3x^2-6x+12$ $x^3-1x^2-10x+12$	Expand: $(x+5)(2x^2+x-2)$ $2x^3+x^2-2x+10x^2+5x-10$ $2x^3+11x^2+3x-10$
Expand: $(x+2)^2(x+2)$ $x^2+2x+2x+4$ x^2+4x+4	Expand: $(x+5)^2(x+5)$ $x^2+5x+5x+25$ $x^2+10x+25$	Expand: $(2x-1)^2(2x-1)$ $4x^2-2x-2x+1$ $4x^2-4x+1$
Expand: $(x-1)^3(x-1)(x-1)$ $(x-1)(x^2-1x-1x+1)$ $(x-1)(x^2-2x+1)$ $x^3-2x^2+x-x^2+2x-1$ x^3-3x^2+3x-1	Expand: $(2x-1)^3(2x-1)(2x-1)$ $(2x-1)(4x^2-2x-2x+1)$ $(2x-1)(4x^2-4x+1)$ $8x^3-8x^2+2x-4x^2+4x-1$ $8x^3-12x^2+6x-1$	Expand: $(2x-5)^3(2x-5)(2x-5)$ $(4x^2-10x-10x+25)(2x-5)$ $(2x-5)(4x^2-20x+25)$ $8x^3-40x^2+50x-20x^2+100x-125$ $8x^3-60x^2+150x-125$

Factor: $25xyz - 15xy^2$ $5xy(5z - 3y)$	Factor: $6x + 9xy - 12x^2y$ $3x(2 + 3y - 4xy)$	Factor: $6x^2y^3 + 9xy^4 - 21x^2y^3$ $3xy^3(2x + 3y - 7x)$ $3xy^3(-5x + 3y)$
Factor: $25x^2 - 36y^2$ $(5x - 6y)(5x + 6y)$	Factor: $16x^2 - y^2$ $(4x - y)(4x + y)$	Factor: $49x^2 - 4$ $(7x - 2)(7x + 2)$
Factor: $x^2 - 3x - 28$ $(x - 7)(x + 4)$	Factor: $x^2 + 2x - 80$ $(x + 10)(x - 8)$	Factor: $x^2 + 10x + 24$ $(x + 4)(x + 6)$
Factor: $4x^2 + 12x + 9$ $(2x + 3)^2$	Factor: $9x^2 + 6x + 1$ $(3x + 1)^2$	Factor: $25x^2 - 20x + 4$ $(5x - 2)^2$

Factor: $5x^2 - 12x + 4$ x -2 5x | $5x^2$ | $-10x$ -2 | $-2x$ | $+4$ $(5x-2)(x-2)$	Factor: $2x^2 - x - 15$ x -3 2x | $2x^2$ | $-6x$ +5 | $+5x$ | -15 $(2x+5)(x-3)$	Factor: $7x^2 - 13x - 2$ x -2 7x | $7x^2$ | $-14x$ +1 | $+1x$ | -2 $(7x+1)(x-2)$
Factor fully: $(x-5)^2 - 1^2$ $A^2 - 1$ $(A-1)(A+1)$ $((x-5)-1)(x-5+1)$ $(x-6)(x-4)$	Factor fully: $x^4 - 17x + 16$ $(x^2-16)(x^2-1)$ $(x-4)(x+4)(x-1)(x+1)$	Factor fully: $x^4 - 16$ $(x^2-4)(x^2+4)$ $(x+2)(x-2)(x^2+4)$
Factor fully: $2x^4 - 9x^2 + 4$ x^2 -4 $2x^2$ | $2x^4$ | $-8x^2$ -1 | $-1x^2$ | $+4$ $(2x^2-1)(x^2-4)$ $(2x^2-1)(x+2)(x-2)$	Factor fully: $2x^2 - 8x^2 + 8$ $-6x^2 + 8$ $-2(3x^2-4)$	Factor fully: $2x^2 - 8$ $2(x^2-4)$ $2(x-4)(x+4)$
What value(s) of k make this trinomial factorable? $2x^2 + kx - 3$ $-x- = -6$ $1 \cdot -6$ $-1 \cdot 6$ $2 \cdot -3$ $-3 \cdot 2$ $k = -5, 5, -1, 1$	What value(s) of k make this trinomial factorable? $6x^2 + kx - 2$ $-x- = -12$ $1 \cdot -12$ $-1 \cdot 12$ $2 \cdot -6$ $-2 \cdot 6$ $3 \cdot -4$ $-3 \cdot 4$ $k = -11, 11, -4, 4, -1, 1$	What value(s) of k make this trinomial factorable? $x^2 + kx + 24$ $-x- = 24$ 1×24 $-1 \cdot -24$ $2 \cdot 12$ $-2 \cdot -12$ $3 \cdot 8$ $-3 \cdot -8$ $4 \cdot 6$ $-4 \cdot -6$ $k = 25, -25, 14, -14, 11, -11, 10, -10$