Factoring Polynomials Name: Key Period:

1) $12x^2 - 36x$ H

$12x(x-3)$

2) $4x^2 - 1$ C

$(2x+1)(2x-1)$

3) $4x^2 - 4x + 1$ O

4 / -2 / -2 / -4

$4x^2 - 2x - 2x + 1$

$2x(2x-1) - 1(2x-1)$

$(2x-1)(2x-1)$ or $(2x-1)^2$

4) $4x^2 + 12x$ I

$4x(x+3)$

5) $4x^2 - 23x + 15$ B

66 / -20 / -3 / -23

$4x^2 - 20x - 3x + 15$

$4x(x-5) - 3(x-5)$

$(4x-3)(x-5)$

6) $12x^2 - 27x - 27$ A

$3(4x^2 - 9x - 9)$

$3(4x+3)(x-5)$

7) $4x^2 + 13x + 10$ J

40 / 8 / 5 / 13

$4x^2 + 8x + 5x + 10$

$4x(x+2) + 5(x+2)$

$(4x+5)(x+2)$

8) $8x^2 + 2x - 6$ P

$2(4x^2 + x - 3)$

$2(4x-3)(x+1)$

9) $4x^2 + 19x + 12$ G

$(x+4)(4x+3)$

10) $12x^2 + 36x + 27$ K

$3(2x+3)^2$ or $3(2x+3)(2x+3)$

11) $8x^2 + 14x + 40$ M

$2(4x^2 + 7x + 20)$

12) $4x^2 + 15x - 25$ D

$(4x-5)(x+5)$

13) $12x^2 + 48x$ L

$12x(x+4)$

14) $4x^2 - x + 4$

NOT FACTORABLE PRIME

15) $8x^2 - 46x + 30$ E

$2(x-5)(4x-3)$

16) $8x^2 + 26x + 20$ F

$2(4x^2 + 13x + 10)$

$2(4x+5)(x+2)$

A	$3(4x+3)(x-3)$
B	$(4x-3)(x-5)$
C	$(2x-1)(2x+1)$
D	$(4x-5)(x+5)$
E	$2(4x-3)(x-5)$
F	$2(4x+5)(x+2)$
G	$(4x+3)(x+4)$
H	$12x(x-3)$

I	$4x(x+3)$
J	$(4x+5)(x+2)$
K	$3(2x+3)^2$
L	$12x(x+4)$
M	$2(4x^2+7x+20)$
N	not factorable
O	$(2x-1)^2$
P	$2(4x-3)(x+1)$

Batman

P	O	O	O	O	O	O	O
A	K	T	V	F	U	L	S
Q	W	H	X	E	R	N	X
T	S	H	Q	D	W	M	Y
I	G	U	Y	J	V	B	R
C	O	O	O	O	O	O	O