Warm up:

Factor.

1, 14
2, 7

1) $x^2 - 5x + 14$

prime

2) $x^2 + 8x + 16$

$(x+4)^2$

3) $x^2 + 12x - 28$

$(x-2)(x+14)$

4) $x^2 - 8x - 48$

$(x+4)(x-12)$

HW Solutions

(3e) $1 - 15mn - 100m^2n^2$

$(1 - 20mn)(1 + 5mn)$

(13) $r^2 - 20rs - 44s^2$

$(r - 22s)(r + 2s)$

(14) $a^2 - 13ab - 48b^2$

$(a - 16b)(a + 3b)$

1, 48
2, 24
3, 16
4, 12
6, 8

(21) $1+15c-34c^2$ $1,34$ $2,17$

$(1+17c)(1-2c)$

(22) $m^2+mn-56n^2$

$(m+8n)(m-7n)$

(12) $n^2+9n-400$

$(n+25)(n-16)$

(12) $y^2-4y-32$

$(y-8)(y+4)$

1,400
2,200
4,100
5,80
8,50
10,40
16,25
20,20

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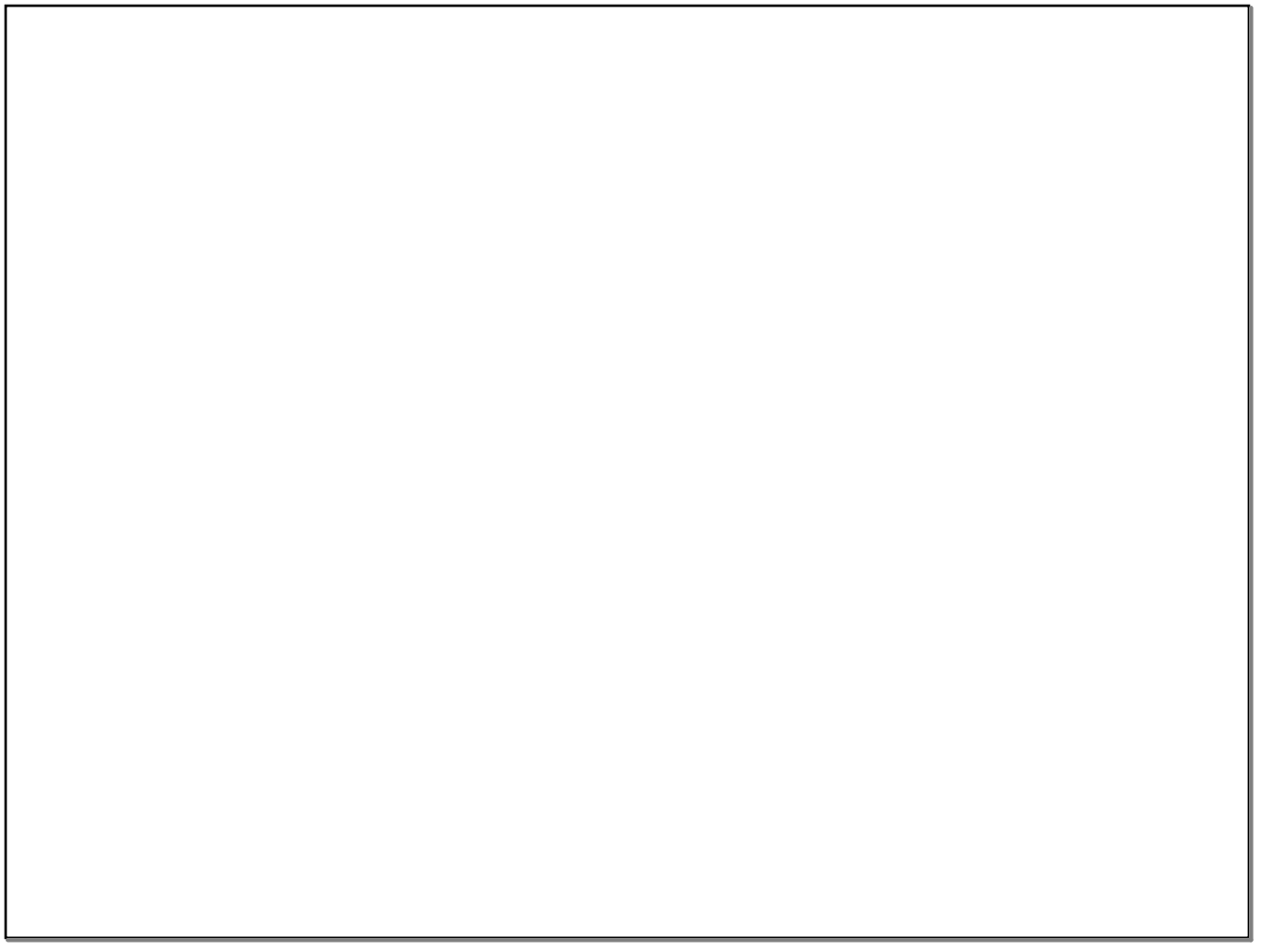

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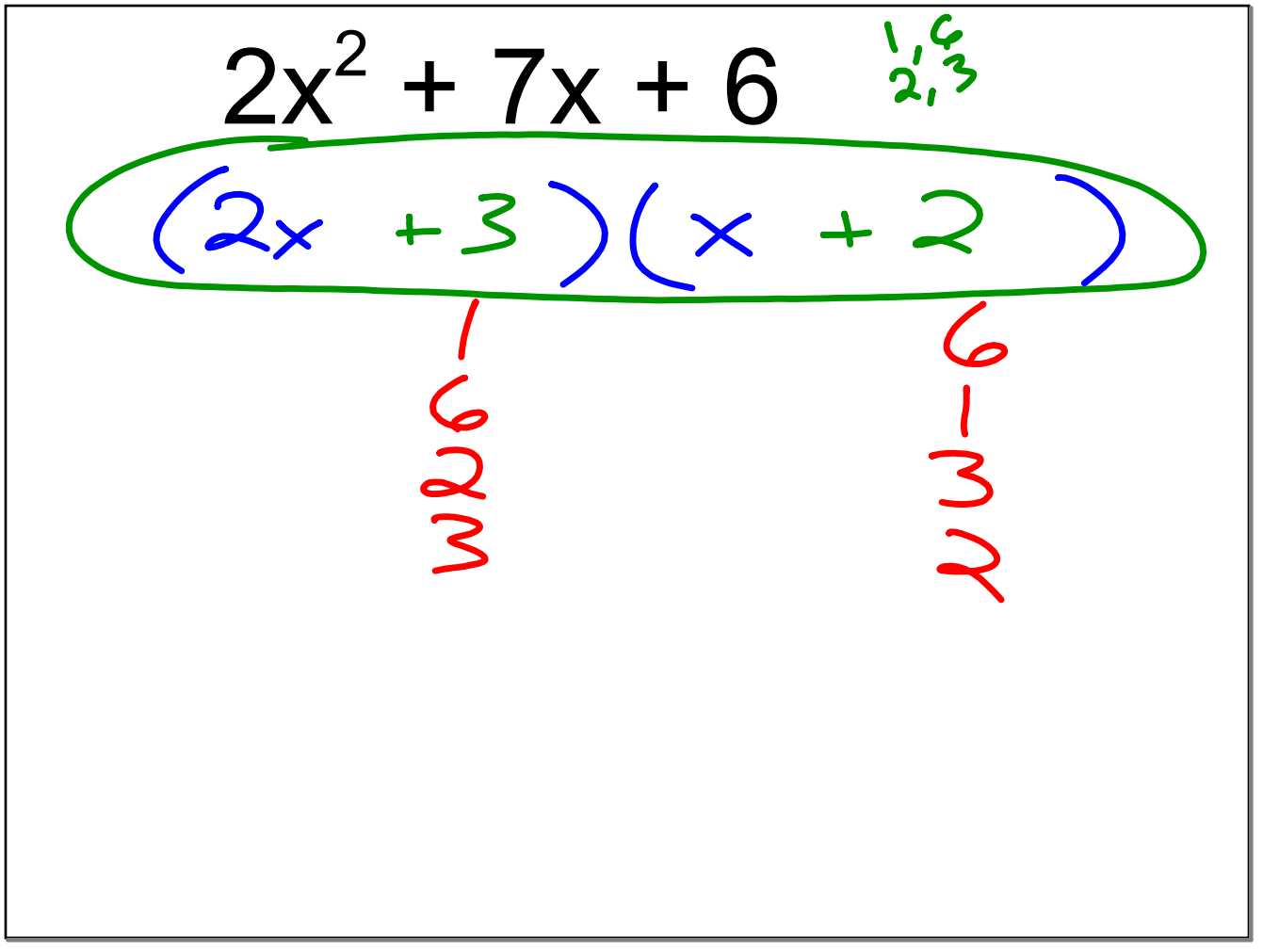

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$20x^2 + 9x + 7$

$(20x \quad 1)(x \quad 7)$

$(10x \quad 1)(2x \quad 7)$

$(5x \quad 1)(4x \quad 7)$

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$10x^2 - x - 21$

1, 21
3, 7

$(10x \quad)(x \quad)$

$(5x + 7)(2x - 3)$

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$12x^2 - 31x + 5$

1, 5

$(12x$ $x)$

$(6x$ $2x)$

$(4x$ $3x)$

prime

$$24x^2 - 18x - 6$$

$$6(4x^2 - 3x - 1)$$

$$6(4x + 1)(x - 1)$$

$$(4x \quad 1)(x \quad 1)$$

$$(2x \quad 1)(2x \quad 1)$$

Factor.

1) $5y^2 + 4y - 1$ $(5y - 1)(y + 1)$

2) $5u^2 - 6u - 2$ prime

3) $5 + 7x - 6x^2$

4) $1 - 5b - 8b^2$

5) $12x^2 + 11x - 15$

6) $9m^2 - 25mn - 6n^2$

7) $(y^2 + 3y - 1)^2 - 9$

1) $5y^2 + 4y - 1$

2) $5u^2 - 6u - 2$

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3) $5 + 7x - 6x^2$

$(5 - 3x)(1 + 2x)$

4) $1 - 5b - 8b^2$

5) $12x^2 + 11x - 15$

6) $9m^2 - 25mn - 6n^2$

7) $(y^2 + 3y - 1)^2 - 9$

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