

# MARCH 8, 2012

ALG2

## GET OUT PG 467



### 3/8 - Factoring Trinomials - Day 1

$$x^2 - 9x + 18$$

Handwritten work for factoring  $x^2 - 9x + 18$ . The constant term 18 is circled in red. Red arrows point from 18 to the factors 1 and 18, 2 and 9, and 3 and 6. The factored form is  $(x - 3)(x - 6)$ . A green oval encloses the factored form, with  $-3x$  and  $-6x$  written below it.

$$n^2 + 10n + 16$$

Handwritten work for factoring  $n^2 + 10n + 16$ . The constant term 16 is circled in blue. Blue arrows point from 16 to the factors 1 and 16, 2 and 8, and 4 and 4. The factored form is  $(n + 2)(n + 8)$ . A blue oval encloses the factored form, with  $+2n$  and  $+8n$  written below it.

$$x^2 - 13x + 36$$
$$= (x - 4)(x - 9)$$

$$r^2 + 11r + 28$$
$$= (r + 7)(r + 4)$$

$$n^2 + 4n - 5$$
$$= (n-1)(n+5)$$

Handwritten annotations: A green bracket under the factors  $(n-1)$  and  $(n+5)$  is labeled with  $-1n$  and  $+5n$ . A small  $1 \cdot 5$  is written above the  $5$  in  $(n+5)$ .

$$x^2 - 6x - 40$$
$$= (x+4)(x-10)$$

$$a^2 - 4a - 60$$
$$= (a+6)(a-10)$$

$$n^2 - 2n - 80$$
$$= (n+8)(n-10)$$

$$\begin{aligned} & 2b^2 + 2b - 4 \\ &= 2(b^2 + b - 2) \\ &= 2(b+2)(b-1) \end{aligned}$$

$$\begin{aligned} & 6m^2 + 18m + 12 \\ &= 6(m^2 + 3m + 2) \\ &= 6(m+2)(m+1) \end{aligned}$$

$$\begin{aligned} & 4m^2 + 32m - 80 \\ &= 4(m^2 + 8m - 20) \\ &= 4(m+10)(m-2) \end{aligned}$$

$$\begin{aligned} & 3r^2 + 6r - 105 \\ &= 3(r^2 + 2r - 35) \\ &= 3(r+7)(r-5) \end{aligned}$$

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# HOMEWORK

BLUE FACTORING WSI

DUE MONDAY

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