

March 28, 2012^{Alg1}
Get out Polynomials WS4



3/28 - Factoring: no lead coefficient and a negative constant

$$x^2 - 5x - 14$$

$1 \cdot 14$
 $2 \cdot 7$

$$= (x + 2)(x - 7)$$

$+2x$
 $-7x$
 $-5x$

$$k^2 + 4k - 21$$

$1 \cdot 21$
 $3 \cdot 7$

$$= (k - 3)(k + 7)$$

$-3k$
 $+7k$
 $+4k$

$$n^2 - 9n - 10$$

$$\begin{array}{l} 1 \cdot 10 \\ 2 \cdot 5 \end{array}$$

$$= (n + 1)(n - 10)$$

↑
Opposite
sign
from



↑
Bigger
gets
the sign
of the
middle
number

$$n^2 + 1n - 12$$

$$\begin{array}{l} 1 \cdot 12 \\ 2 \cdot 6 \\ 3 \cdot 4 \end{array}$$

$$= (n - 3)(n + 4)$$

$$v^2 + 3v - 28$$

$$= (v - 4)(v + 7)$$

$$r^2 - 1r - 20$$

$$= (r + 4)(r - 5)$$

$$\begin{aligned} & n^2 + n - 72 \\ &= (n+9)(n-8) \end{aligned}$$

$$\begin{aligned} & v^2 - 4v - 60 \\ &= (v-10)(v+6) \end{aligned}$$

Homework

Yellow Polynomials WS5

Due **TODAY!**