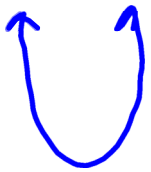
Calendar Math:

How did the function transform?

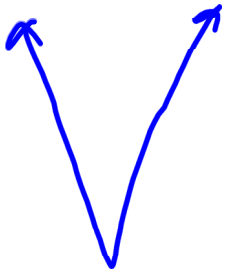
example 1. $y = (x - 3)^2 + 5$

3 units right
5 units up



Example 2. $y = -|x + 2| - 4$

2 units left
4 units down
flip



Example 3: $y = \sqrt{x - 1} + 4$

1 unit right
4 units up

1.3 Short MORE Factoring

Sep 13-2:50 PM

1. $a^2 + 9a + 18$

$(a+3)(a+6)$

18
3 6
9

1, 18
2, 9
3, 6

Sep 13-2:50 PM

5. $2a^2 + 28a + 96$

$2(a^2 + 14a + 48)$

$2(a+6)(a+8)$

48

6 8

14

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

Sep 13-2:52 PM

7. $7n^2 - 39n - 70$

$(7n + 10)(n - 7)$

-490

$10 \quad -49$

-39

$5, 98$

$10, 49$

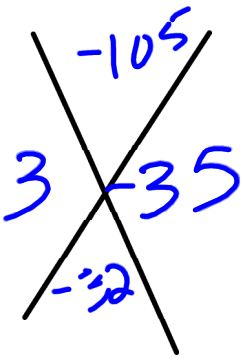
Sep 13-2:54 PM

9. $\frac{35x^2}{5} - \frac{160x}{5} - \frac{75}{5}$

$5(7x^2 - 32x - 15)$

$5(7x + 3)(\frac{7x}{7} - \frac{35}{7})$

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



5, 21

3, 35

Sep 13-2:56 PM

$x^2 + 2xy - 3y^2$

$(x - 1y)(x + 3y)$

$-1 \cdot 3 = -3$, $2 \cdot 3 = 3$

$\frac{x^3}{x} + \frac{2x^2}{x} + \frac{3x}{x}$

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

Sep 14-12:02 PM