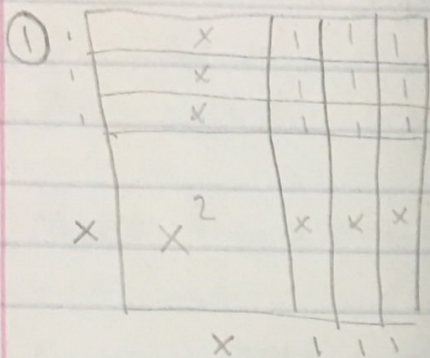


9/12/16

SWBAT Begin to solve quadratics by completing the square

Mindful Monday: One thing you should know about me is that I am on JNN because I will probably do a story including teachers, get ideas from them, or get more information on a topic.

2.3

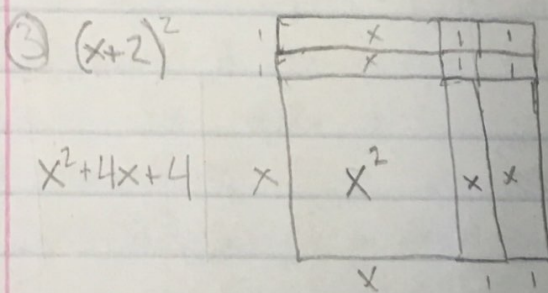


$x^2 + 6x + 9$

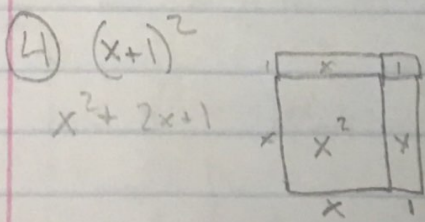
② $(x+3)^2 = (x+3)(x+3)$

SAME

$x^2 + 3x + 3x + 9$
 $\rightarrow x^2 + 6x + 9$



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



$(x+1)(x+1)$
 $x^2 + x + x + 1$
 $x^2 + 2x + 1$

Perfect square trinomial

$\left(\frac{b}{2}\right)^2 = c$

⑥ a) $x^2 + 4x = \left(\frac{4}{2}\right)^2 = 2^2$ $x^2 + 4x + 4$

b) $x^2 + 6x = \left(\frac{6}{2}\right)^2 = 3^2$ $x^2 + 6x + 9$

2.4

① $4x^2$

x	x^2	x^2
x	x^2	x^2
x	x	x

$4x^2$

③ $2(x+1)^2$

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

$2(x^2+x+x+1)$

$2x^2+4x+2$

$2(x^2+2x+1)$

④ $3(x+2)^2$

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

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

$3x^2+12x+12$

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

⑤ $2x^2+8x$

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

$2(2)$

$2x^2+8x+8$

$2(x+2)^2$

Standard form

vertex form

⑥ $3x^2+24x$

$3(x^2+8x+16)$

$2(4)$

$3x^2+24x+48$

Standard form

$3(x+4)^2$

vertex form