Bellwork Alg 2 2nd, 5th, 6th hrs Thursday, October 11, 2018

1. Write in Standar Form:
$y = -2(x+3)^2 + 7$

2. Simplify:
$(2+i)^4$

3. Fill in the blanks: $x^2 + 42x$_____ = (_____ _____)^2

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ANSWERS

1. Write in Standar Form:

$y = -2(x+3)^2 + 7$

$= -2(x^2+6x+9) + 7$

$= -2x^2 - 12x - 18 + 7$

$= -2x^2 - 12x - 11$

2. Simplify:

$(2+i)^4$

$= (2+i)^2 (2+i)^2$

	2	$+i$
2	4	$+2i$
$+i$	$+2i$	$+i^2 = -1$

$3 + 4i$

$= (3+4i)(3+4i)$

	3	$+4i$
3	9	$+12i$
$+4i$	$+12i$	$+16i^2 = -16$

$-7 + 24i$

3. Fill in the blanks:

$x^2 + 42x$ $+441$ $= (x + 21)^2$

21^2

$\frac{42}{2}$