

Bellwork Tuesday, May 13, 2014

1. Simplify. Give answer in Standard Form.

$$5x^2(3x^2 - x + 4) - 2x(7x^3 + 8x^2 - 3x + 5)$$

$$20x^2 + 6x^2$$

$$x^4 - 21x^3 + 26x^2 - 10x$$

3. Expand each. Write answer in Standard Form.

a) $(c + 5)(c - 8)$

$$c^2 - 3c - 40$$

c) $(y - 6)^2$

$$y^2 - 12y + 36$$

b) $(4k - 1)(2k + 7)$

$$\begin{aligned} & 8k^2 + 28k - 2k - 7 \\ & 8k^2 + 26k - 7 \end{aligned}$$

2. Factor.

$$81a^4b^3c + 48a^2b^5c^4 - 42ab^6c^7$$

$$3abc(27a^3 + 16ab^3c^3 - 14b^6c^6)$$

A factor tree for the number 81. It starts at the top with 81, which branches into 3 and 27. 3 is circled in red. 27 branches into 3 and 9, both of which are crossed out with a large red X.

4. Find 2 #'s that multiply to the top# and add to the bottom#.

a.

-96	
-16	+6
1 · 96	
2 · 48	
3 · 32	
4 · 24	
6 · 16	
-10	

b.

60	
-12	-5
-17	
-160	
2 · 30	
3 · 20	
4 · 15	
5 · 12	
6 · 10	

c.

36	
18	2
20	
36	
18	2
20	
36	