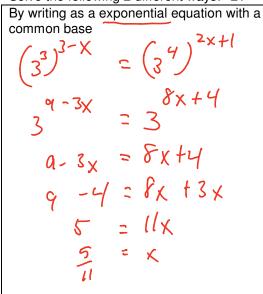
## 3.6 Solving Exponential Equations

Solve the following 2 different ways:  $27^{3-x} = 81^{2x+1}$ 



Using Log Base 3
$$log_{3}(27^{3-x}) = log_{3}(8l^{2x+1})$$

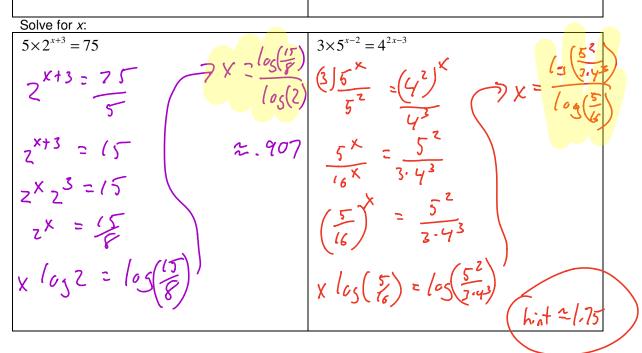
$$(3-x)log_{3}(27) = (2x+1)log_{3}(8l)$$

$$(3-x) = (2x+1) + 4$$

$$9-3x = 8x + 3x$$

$$5 = 11 + x$$

$$5 = x$$



Solve for x in terms of a, b, and c.

$$ab^{2x-1} = c^{x-4}$$

$$a\frac{b}{c} = \frac{c}{c}$$

$$a\frac{c}{c} = \frac{c}{c}$$

$$a\frac{c}{$$