

Date: _____



Problem Solving with Polynomials

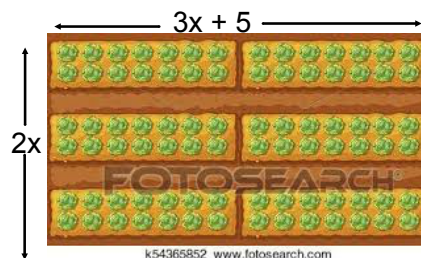
We can now apply what we know about polynomial expressions (and how to expand and simplify them) to create models for real-world situations. Please make sure that you:

- Define your variables ("Let" statements)
- Read your mathematical expressions with words to make sure that they make sense
- Continue to follow the same processes you used when it was not a word problem - words don't change math!!

Practice Problems:

- 1) An electrician charges \$100 per visit, plus \$30 per hour of work. Write an algebraic expression to describe the service charge for one household visit, and then find the total service charge for a 3.5 hour visit.

- 2) A garden has the dimensions shown below. Write simplified expressions for the area and perimeter of the garden.



- 3) A minor league baseball team gives players a bonus of \$500 for every home run they hit, on top of their base salary. Write a simplified expression for a player's total earnings if the base salary is \$20 000. How much would a player earn if he hit 22 home runs?

