

High School:

Fall Harvest

1. Sam has already picked 2 pounds of peas from his plants. One plant averages $\frac{1}{4}$ of a pound of peas. Write an equation to represent the total number of pounds (y) based on (x) number of plants Sam has remaining.

Equation	
----------	--

2. Russell farms use a field that is 650 ft by 340 ft to grow a variety of pumpkins. They use 40% of the field to plant white pumpkins, 40% of the field to plant miniature pumpkins and the rest for large pumpkins. Plants for large pumpkins need to be spaced 6 feet apart (circle with radius of 6 ft). On average 70% of the large pumpkin plants mature and produce pumpkins. Each mature plant yields 3 large pumpkins. How many large pumpkins can the Russell farms expect from their crop?

3. Beck's Hybrids is an international seed corn company that originated in Atlanta IN (this authors hometown). They have over 11 million acres of seed corn. They have 12 combines that each harvest corn at a rate of 8 acres per hour. They have 7 combines that can harvest corn at 5 acres per hour. How many days does it take Beck's Hybrids to harvest all of their seed corn? Justify your answer.
