Goals: By the end of this activity, you should understand linear equations and their use in everyday situations and know how solve them.

## Pumpkin Activity part 1

At the pumpkin patch, pick out your own pumpkin. The cost to get in to the farm was $\$ 5$ per person, and each pumpkin costs $\$ 0.85$ per pound, calculate the cost of your own pumpkin, and your classmate's pumpkins (assuming each classmate picks out a different size pumpkin). Record your answers in the chart below.

Create an equation that can determine the total cost

| Weight of the <br> pumpkin | Equation | Total Cost |
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## Pumpkin Activity part 2

The farm decided to change the pricing of the pumpkins. The cost to get into the farm is still the same. If a pumpkin is small and it weighs less than 5 pounds, the pumpkin costs $\$ 0.88$ per pound. If the pumpkin is medium, weighs more than 5 pounds and less than 9 pounds, the pumpkin costs $\$ 0.77$ per pound. If the pumpkin is large, weighs more than 9 pounds, the pumpkin costs $\$ 0.66$ per pound.

Create an equation for the total cost of each size of a pumpkin:
Small Pumpkins: $\qquad$
Medium Pumpkins: $\qquad$
Large Pumpkins: $\qquad$

| Weight of the <br> pumpkin | Equation | Total Cost |
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Pumpkin Activity Part3

The pumpkin patch put their pricing back to the way it was before, each pumpkin costs $\$ 0.85$ per pound and the cost to get in is still $\$ 5$. Use these costs to answer the questions below.

1. If you only have $\$ 5.00$. What is the largest pumpkin you can afford?
2. If you only have $\$ 10.00$, what is the largest pumpkin you can afford?
3. If you have $\$ 20.00$, what is the largest pumpkin you can buy?
4. Assume that the prices went back to the way they were in part 2 , the size of the pumpkin changes the price per pound. If you have $\$ 15$, how big of a pumpkin can you afford?
