6th – 8th Grade:
Fall Leaves

1. The white oak tree is known for its beautiful burgundy color in the fall. One oak tree has approximately 450,000 leaves. The park has 20 oak trees. How many leaves should the park expect to pick up or mulch in the fall? Justify your answer.

_____

_____

_____

2. Linda is making fall decorations using the leaves she has collected. She has spent 10 hours collecting leaves and another 40 hours making the decorations. She has 15 decorations to sell. She sells each decoration for $35. Her total expenses to make the decorations is $10. If she successfully sells all the decorations, then what is her average hourly pay? Justify your answer.

_____

_____

_____

3. Paul and Bryson both earn money in the fall by raking and collecting leaves. Table 1 provides details for each person and the time it takes to rake leaves.

Table 1: Leaf Collecting Businesses

Name of Person	Time it takes to clear 1 acre of leaves	Expenses	Revenue for each acre
Paul	30 minutes	Pay for leaf blower $35 per hour	$20
Bryson	85 minutes	NONE	$15

Which person has a better plan for earning money? Justify your answer.

_____

_____

_____