High School:

Fall Foliage

Kate, Janet and Nikki 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 |
|----------------|---|--|-----------------------|
| Kate | 20 minutes | Pay for leaf blower \$30 per hour | \$20 |
| Janet | 30 minutes | Pay for gas to use parents leaf blower \$2.50 per hour | \$15 |
| Nikki | 80 minutes | NONE | \$25 |

| 1. | Write an equation to represent the amount of money (y) Kate earns based on (x) hours | of |
|----|--|----|
| | work. | |

| Equation | |
|----------|--|

| 2. | Nikki's claim? Justify your decision. |
|----|---|
| | |
| 3. | Janet claims that they would all earn more money if they worked together. Do you agree or disagree with Janet's claim? Justify your decision. |
| | |

