

## INDUCTIVE AND DEDUCTIVE LOGIC (HANDOUTS A AND B)

### Handout A

The cafeteria of Amos High School publishes a calendar of the meals (entrée, drink, and dessert) served each day of school. Use the partial calendar below to make the predictions that follow.

### Cafeteria Calendar: October

Monday	Tuesday	Wednesday	Thursday	Friday
<b>1</b> roast turkey mashed potatoes apple juice cherry pie	<b>2</b> ham sandwich orange juice chocolate cake	<b>3</b> pizza apple juice peanut butter cookie	<b>4</b> hamburger orange juice vanilla pudding	<b>5</b> chicken fingers apple juice chocolate chip cookie
<b>8</b> hot dogs orange juice cherry pie	<b>9</b> spaghetti and meatballs apple juice chocolate cake	<b>10</b> grilled cheese orange juice peanut butter cookie	<b>11</b> fried chicken apple juice vanilla pudding	<b>12</b> ham sandwich orange juice chocolate chip cookie
<b>15</b> pizza apple juice cherry pie	<b>16</b> hamburger orange juice chocolate cake	<b>17</b> chicken fingers apple juice peanut butter cookie	<b>18</b> hot dogs orange juice vanilla pudding	<b>19</b> spaghetti and meatballs apple juice chocolate chip cookie
<b>22</b> grilled cheese orange juice cherry pie	<b>23</b> fried chicken apple juice chocolate cake	<b>24</b>	<b>25</b>	<b>26</b>
<b>29</b>	<b>30</b>	<b>31</b>		

1. Predict what will be served in this cafeteria on October 24.
2. Predict what will be served in this cafeteria on October 29.
3. Predict what will be served in this cafeteria on November 5.
4. Predict what will be served in this cafeteria on December 15.
5. How confident of your answers to question 1-4 are you? Explain.

## Handout B

The cafeteria of Amos High School serves lunch every day Monday through Friday. Unfortunately, it has very limited options of what to serve. They use the following rules to determine what to serve each day:

1. *On the first Monday of each month, the cafeteria serves roast turkey, mashed potatoes, apple juice, and cherry pie.*
2. *On odd number days, the cafeteria serves apple juice.*
3. *On even number days (unless it is the first Monday of the month), the cafeteria serves orange juice.*
4. *What they serve for dessert depends on the day of the week as follows:*
  - a. *Monday—Cherry Pie*
  - b. *Tuesday—Chocolate Cake*
  - c. *Wednesday—Peanut Butter Cookie*
  - d. *Thursday—Vanilla Pudding*
  - e. *Friday—Chocolate Chip Cookie*
5. *The cafeteria rotates entrées in the following order:*
  - a. *Ham Sandwich*
  - b. *Pizza*
  - c. *Hamburger*
  - d. *Chicken Fingers*
  - e. *Hot Dogs*
  - f. *Spaghetti and Meatballs*
  - g. *Grilled Cheese*
  - h. *Fried Chicken*

On Tuesday, October 2, the cafeteria served ham sandwiches. Based on this information, make the predictions that follow.

1. Predict what will be served in this cafeteria on October 24.
2. Predict what will be served in this cafeteria on October 29.
3. Predict what will be served in this cafeteria on November 5.
4. Predict what will be served in this cafeteria on December 15.

5. How confident of your answers to question 1-4 are you? Explain.