1. Use a properly labeled Venn diagram to determine the validity of the following argument. State whether the argument is VALID or INVALID. Explain. *(7 points)*

   1. All children are cute.
   2. Timmy is cute.

   _____

   Therefore, Timmy is a child.

2. What pattern do you see in the numerical sequence 1, 2, 5, 10, 17 ? What do you think the most likely next two numbers are? Explain. *(6 points)*

3. Compute the truth table for the logical expression $(p \lor q) \to (p \land q)$. *(7 points)*