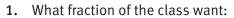
Ms Martell's class is planning a pizza party to celebrate the end of term. They need to order enough food for 23 students and Ms Martell.

Each person can choose one or more of these pizza toppings: pineapple, mushroom, and onion.

Listing the toppings choices is quite complicated, so the students organise them using a Venn diagram like this.



- a. mushroom by itself or with other toppings?
- **b.** onion by itself or with other toppings?
- c. pineapple by itself or with other toppings?
- **d.** both onion and pineapple but not mushroom?
- e. pineapple by itself?
- 2. Each pizza will be cut into six pieces.
  - a. How many pizzas will they need to order so that everyone gets three pieces?
  - **b.** The Vege pizza will suit the eight people who want only the pineapple topping on their three pieces.
    - i. What fraction of all the pizzas will need to be Vege?
    - ii. How many pizzas will be Vege?

## Pizza Perfection Menu

Classic: salami with mushroom and onion

Hawaiian: ham with pineapple and onion

Onion Lovers': bacon with onion

Fab Fungi: bacon with mushroom

Vege: pineapple on a tomato base



pineapple