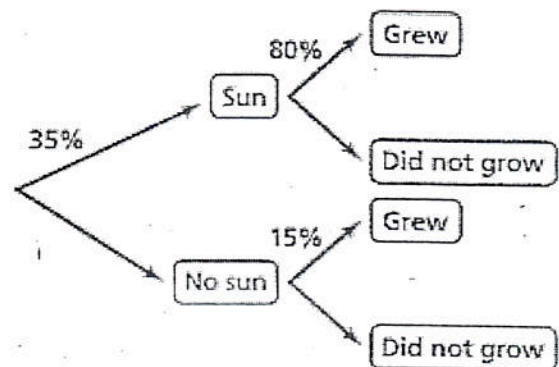


Integrated 2
Tree Diagrams

Name _____
Date _____ Period _____

You can use a tree diagram to organize information.

- 35% of a group of plants prefer the sun.
- 80% of the plants that received sun, grew.
- 15% of the other plants grew.



Find the following probabilities.

1. $P(\text{Sun and Grew})$

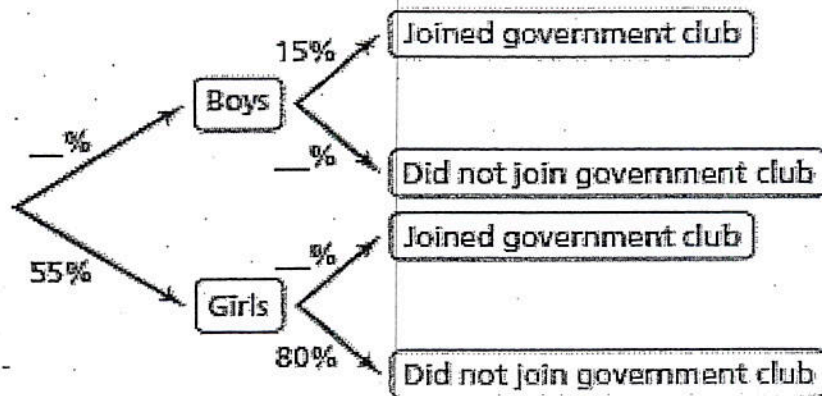
To determine the probability,
multiply the probabilities along
each branch.

2. $P(\text{No Sun and Grew})$

3. $P(\text{Grew}) = P(\text{Sun and Grew}) + P(\text{No Sun and Grew})$

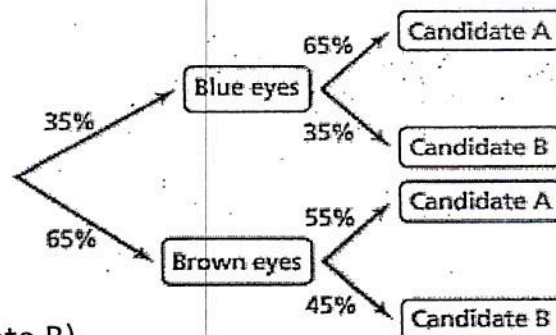
To combine probabilities
of an outcome, add all the
favorable outcomes.

The following represents the percent of boys and girls in the 10th grade at a school, and whether they joined the student government club.



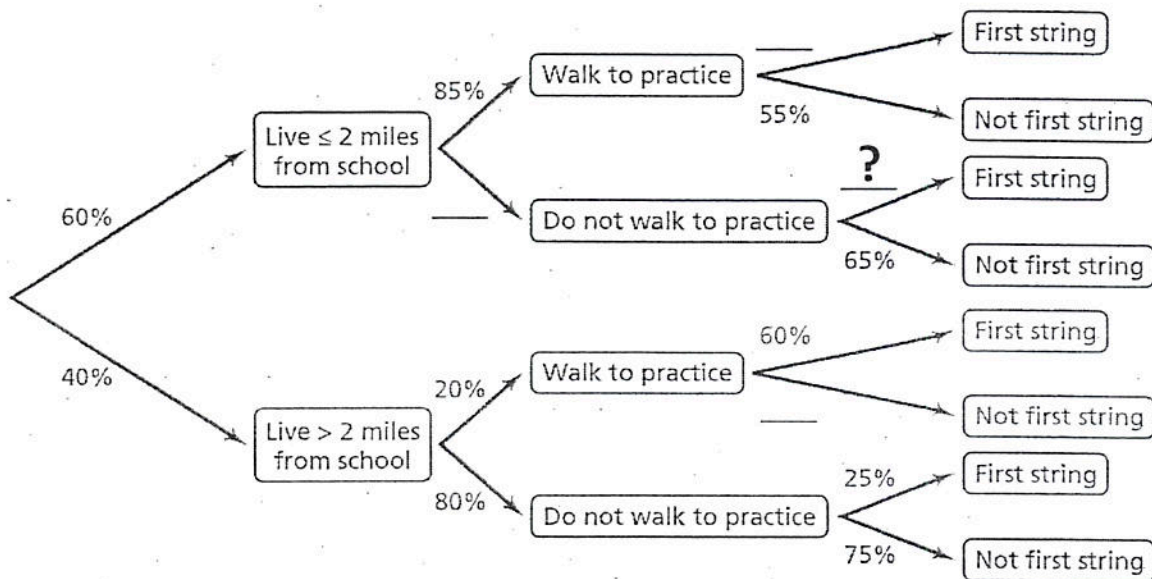
4. Complete the tree diagram by filling in the blanks.
5. Find $P(\text{Girls AND Did not join government club})$
6. What is the overall percentage of students who joined the government club?

The tree diagram shows the percent of blue-eyed voters and brown-eyed voters that voted for 2 candidates.



7. $P(\text{Blue Eyes AND Candidate B})$
8. What is the overall percentage of voters who voted for candidate A?

The tree diagram below shows the percentage of a school's basketball players who live within 2 miles of school, whether or not they walk to practice, and whether or not they are one of the 5 players in the first string (players who start the game).



9. Explain what the probability of the “?” in the blank on the tree diagram represents.

10. Find $P(\text{Lives} > 2 \text{ miles from school AND Walks to practice})$

11. What is the overall percentage of basketball players who Live ≤ 2 miles from school who do not walk to practice and are not on the first string?