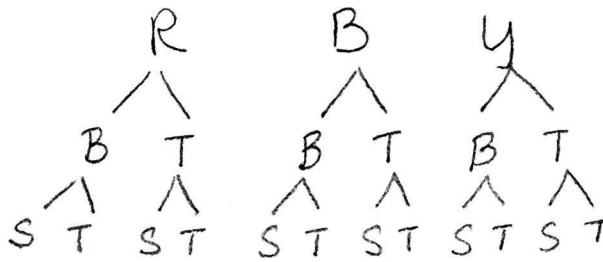


## PART 6: GIFT SHOP (TREE DIAGRAMS)

Answers

Your mascot for the park is a furry brown bear named \_\_\_\_\_ (fill in the name you have chosen). You have decided to sell a small stuffed animal version of him in your gift shop for kids. In order to make it more exciting, you are letting each child choose the bear's outfit. The children will have the option of choosing a red, blue, or yellow shirt, black shorts or tan shorts, and sandals or tennis shoes for the bear. In the space below, create a tree diagram showing all of the different possible outcomes for the bear's outfit.



RBS	BBS	YBS
RBT	BBT	YBT
RTS	BTS	YTS
RTT	BTT	YTT

12. possibilities

### USE YOUR TREE DIAGRAM TO ANSWER THE QUESTIONS BELOW:

- 1) What is the probability of the bear wearing a red shirt? Express your answer as a fraction, decimal, and percent.

$$\frac{4}{12} = \frac{1}{3} = .33 = 33.\bar{3}\%$$

- 2) What is the probability of the bear wearing black shorts and tennis shoes? Express your answer as a fraction, decimal, and percent.

$$\frac{3}{12} = \frac{1}{4} = .25 = 25\%$$

- 3) What is the probability of the bear wearing sandals with a yellow shirt? Express your answer as a fraction, decimal, and percent.

$$\frac{2}{12} = \frac{1}{6} = .1\bar{6} = 16.\bar{6}\%$$