

Calculate probabilities of independent events

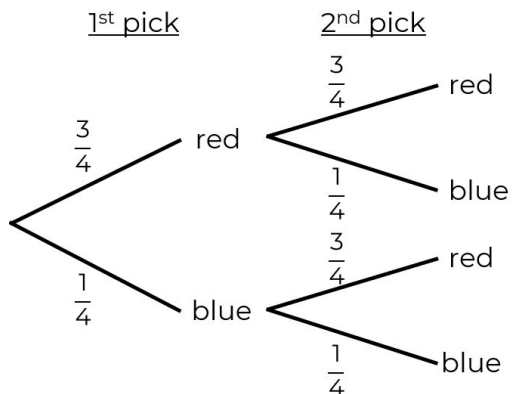
Maths

Mr Chan



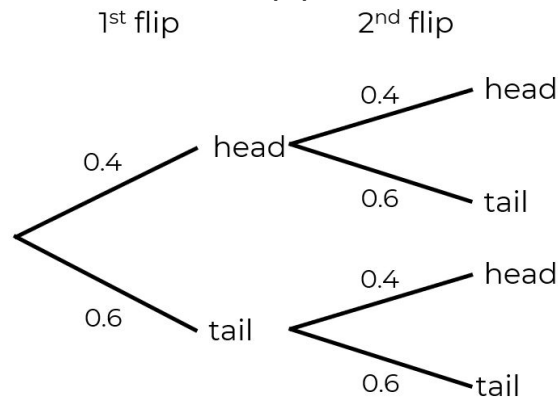
Calculate probabilities of independent events

1. Tim takes two counters at random from a bag. He replaces the first counter after picking it out.



Calculate the probability that Tim picks two blue counters.

2. A biased coin is flipped twice.



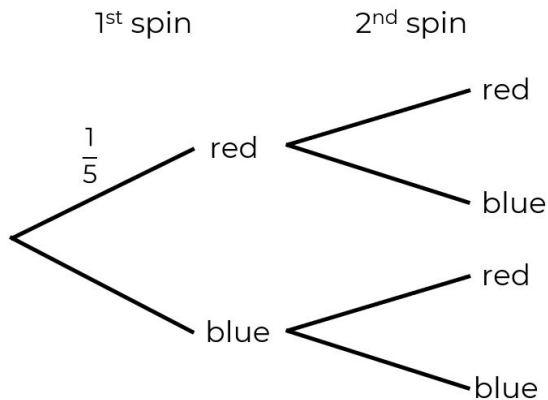
a) Calculate the probability of flipping two heads.

b) Calculate the probability of flipping exactly one tail.



Calculate probabilities of independent events

3. A fair five-sided spinner
Is spun twice.



- Complete the tree diagram.
- Calculate the probability of spinning red twice.

4. The probability that it rains on a Friday is 0.2. The probability that it will rain on a Saturday is 0.35.

a) Draw a probability tree diagram to show the outcomes.

b) Calculate the probability that it will rain on at least one of the days.

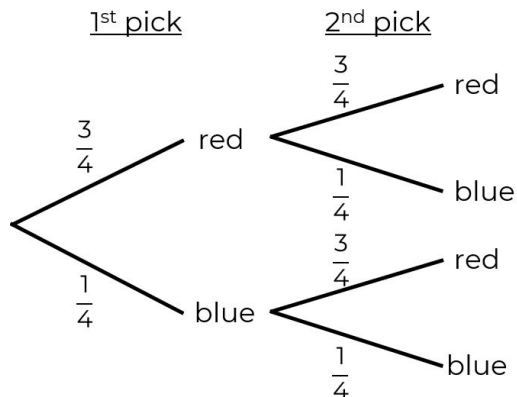


Answers



Calculate probabilities of independent events

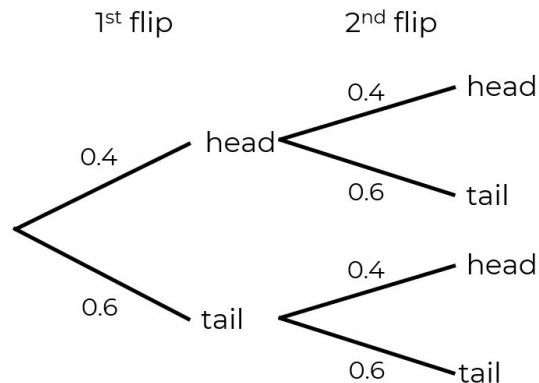
1. Tim takes two counters at random from a bag. He replaces the first counter after picking it out.



Calculate the probability that Tim picks two blue counters.

$$\frac{1}{16}$$

2. A biased coin is flipped twice.



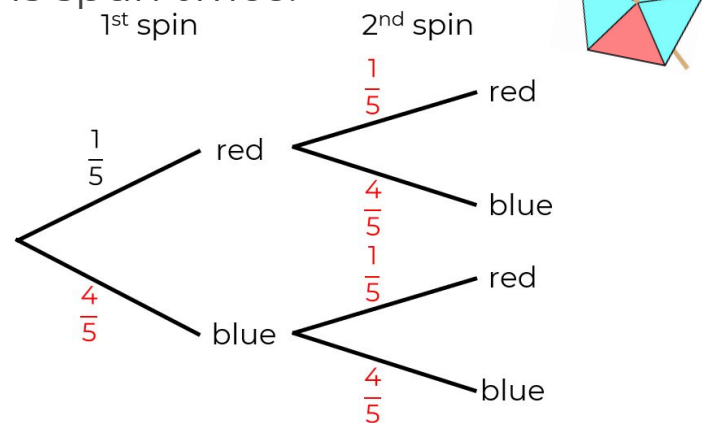
a) Calculate the probability of flipping two heads. **0.16**

b) Calculate the probability of flipping exactly one tail. **0.48**



Calculate probabilities of independent events

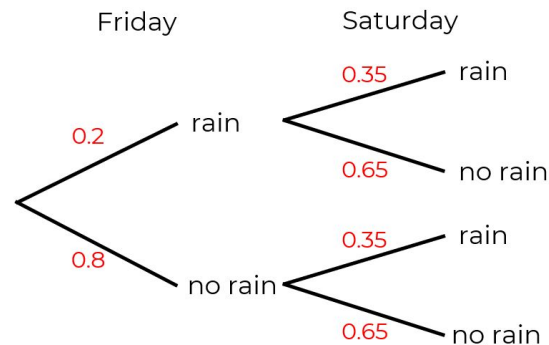
3. A fair five-sided spinner
Is spun twice.



- Complete the tree diagram.
- Calculate the probability of spinning red twice. $\frac{1}{25}$

4. The probability that it rains on a Friday is 0.2. The probability that it will rain on a Saturday is 0.35.

a) Draw a probability tree diagram to show the outcomes.



- Calculate the probability that it will rain on at least one of the days. 0.48

