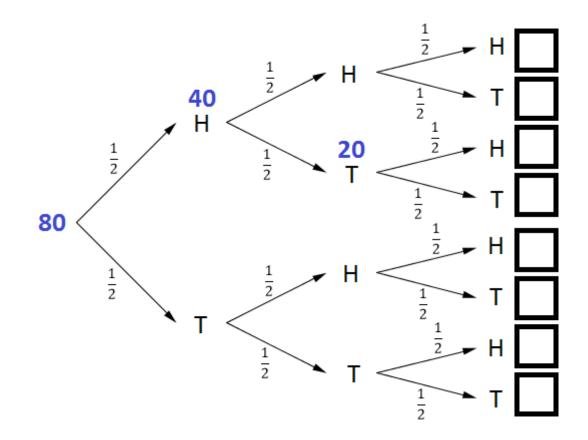
Using Tree Diagrams 1

Imagine 80 people each toss a fair coin three times. By using the tree diagram below, work out how many people you would expect to end up with each of the possible outcomes. A few of the numbers have been done for you.

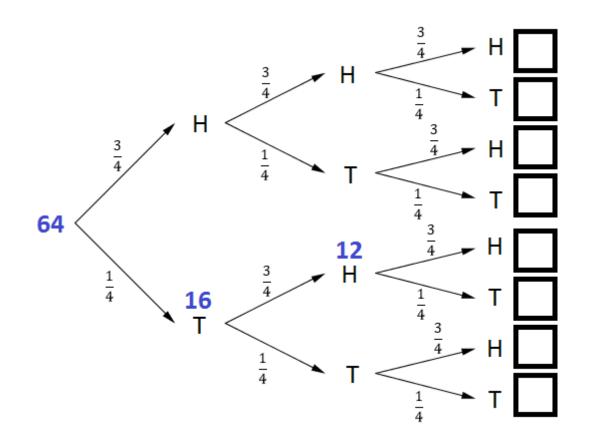


Use the completed tree diagram to answer the following questions: *Remember to simplify your fractions where possible.*

- 1. What fraction of the 80 people got three tails?
- 2. What fraction of the 80 people got more heads than tails?
- 3. What fraction of the 80 people got exactly 2 tails?
- 4. What is the **chance** that when you toss a coin three times you get exactly 2 tails?

Using Tree Diagrams 2

Imagine 64 people each toss a *biased* coin three times. This coin has a $\frac{3}{4}$ chance of landing on Heads. By using the tree diagram below, work out how many people you would expect to end up with each of the possible outcomes. A few numbers have been done for you.



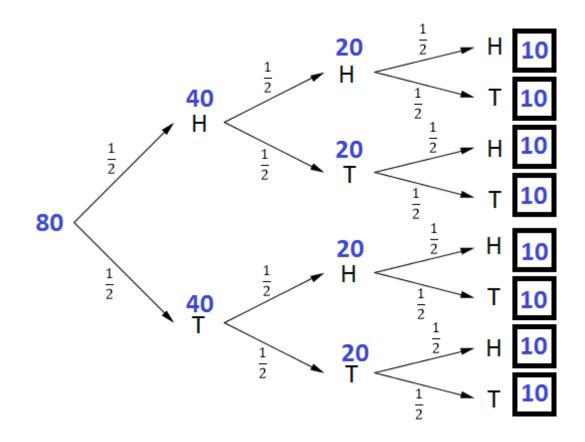
Use the completed tree diagram to answer the following questions: *Remember to simplify your fractions where possible.*

- 1. What **fraction** of the 64 people got three tails?
- 2. What fraction of the 64 people got more heads than tails?
- 3. What fraction of the 64 people got exactly 2 tails?

4. What is the chance that when you toss this coin three times you get exactly 2 tails?

Using Tree Diagrams 1 SOLUTIONS

Imagine 80 people each toss a fair coin three times. By using the tree diagram below, work out how many people you would expect to end up with each of the possible outcomes. A few of the numbers have been done for you.



Use the completed tree diagram to answer the following questions: *Remember to simplify your fractions where possible.*

1. What fraction of the 80 people got three tails?

$$\frac{10}{80} = \frac{1}{8}$$

2. What fraction of the 80 people got more heads than tails?

$$\frac{40}{80} = \frac{1}{2}$$

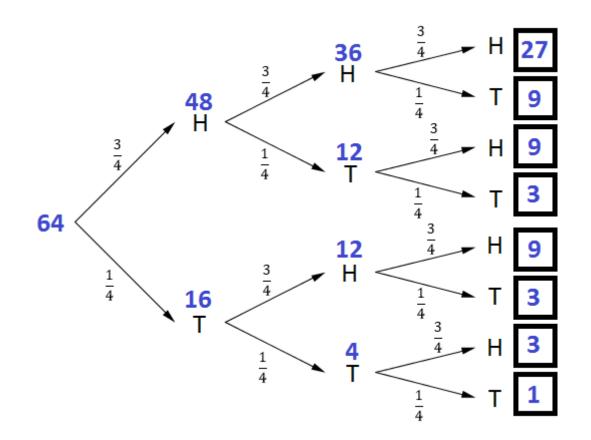
3. What fraction of the 80 people got exactly 2 tails?

$$\frac{30}{80} = \frac{3}{8}$$

4. What is the chance that when you toss a coin three times you get exactly 2 tails?

Using Tree Diagrams 2 SOLUTIONS

Imagine 64 people each toss a *biased* coin three times. This coin has a $\frac{3}{4}$ chance of landing on Heads. By using the tree diagram below, work out how many people you would expect to end up with each of the possible outcomes. A few numbers have been done for you.



Use the completed tree diagram to answer the following questions: *Remember to simplify your fractions where possible.*

1. What fraction of the 64 people got three tails?

64

2. What fraction of the 64 people got more heads than tails?

$$\frac{54}{64} = \frac{27}{32}$$

- 3. What fraction of the 64 people got exactly 2 tails?
- 4. What is the chance that when you toss this coin three times you get exactly 2 tails?