

# Find the predicted number of outcomes

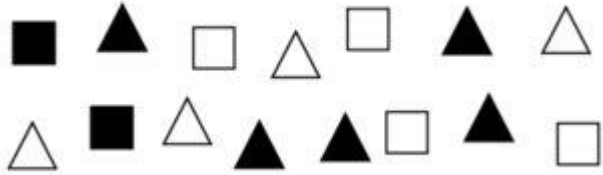
Maths

Mrs Dennett



# Find the predicted number of outcomes

1. A bag contains these shapes.



A shape is chosen at random.

a) Find the following probabilities.

i)  $P(\text{Black square})$

ii)  $P(\text{Triangle})$

iii)  $P(\text{Not white})$

b) Ron says,

“If I choose a shape 300 times, 25% of them will be black squares.”

Do you agree?

Explain your answer.



## Find the predicted number of outcomes

2. Mo and Rosie each flip a coin.

Mo flips his coin 20 times.

Rosie flips her coin 100 times.

How many times would you expect each of them to get heads?

3. Maisie rolls a fair dice 600 times.

How many times would you expect her to roll a 6?

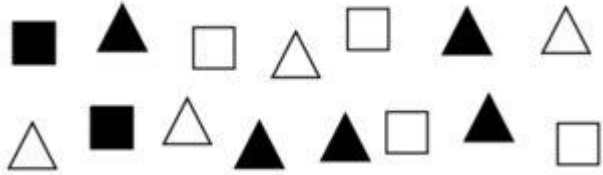


# Answers



# Find the predicted number of outcomes

1. A bag contains these shapes.



A shape is chosen at random.

a) Find the following probabilities.

i)  $P(\text{Black square}) = \frac{2}{15}$

ii)  $P(\text{Triangle}) = \frac{9}{15}$

iii)  $P(\text{Not white}) = \frac{7}{15}$

b) Ron says,

“If I choose a shape 300 times, 25% of them will be black squares.”

Do you agree?

Explain your answer.

No, the black squares do not represent 25% of the shapes.



## Find the predicted number of outcomes

2. Mo and Rosie each flip a coin.

Mo flips his coin 20 times.

Rosie flips her coin 100 times.

How many times would you expect each of them to get heads?

Mo 10 times

Rosie 50 times

because  $P(\text{Head}) = \frac{1}{2}$  for a fair coin

3. Maisie rolls a fair dice 600 times.

How many times would you expect her to roll a 6?

$$600 \times \frac{1}{6} = 100 \text{ times}$$

