Probability and relative frequency

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Name:

I roll a fair, 6 sided dice. Find the probability that I:

a) roll a 4

c) roll an even number

e) roll a number more than 3

b) roll a 6

d) **don't** roll a 5 or 6

f) roll a number under 3

I pick a random letter from the alphabet. Find the probability that I:

g) Pick a W

j) Pick a consonant

h) Pick a B

k) Pick a letter after S in the alphabet

i) Pick a vowel

l) Pick a letter from the word SCHOOL

I pick a random number from the numbers 1 to 20. Find the probability that I:

m) Pick a multiple of 4

q) choose a square number

n) Pick a number which is greater than 14

r) Pick a non-triangular number

o) Pick a number which is **not** a multiple of 4 or 6

s) Pick a factor of 15

p) Pick a prime number

t) a multiple of 5 or a factor of 12

A coin is flipped 100 times, It lands on heads 40 times.

a) What is the relative frequency of flipping a head?

b) It is flipped another 100 times, and it lands on 30 more heads. What is the new relative frequency?

c) After a further 50 flips, it lands on **tails** 30 times. What is new relative frequency of getting a head?

A biased dice is rolled 50 times, it lands on six 15 times.

d) What is the relative frequency of getting a six?

e) It's rolled another 100 times, and it lands on six 25 more times. What is the new relative frequency?

f) After another 150 rolls, it lands on six 35 times. What is new relative frequency of getting a six?

Exam question:

A spinner has a green sector, blue sector and red sector. The spinner is spun 300 times and it landed on red 124 times and on green 80 times.

a) What is the relative frequency of the spinner landing on blue?

b) From the next 100 spins, two fifths landed on green. What is the new relative frequency of the spinner landing on green?