

Worksheet

Probabilities

1. A sweetie bag holds sweeties all the same size. It contains 6 Black Jacks, 3 Fruit Salads, 2 Refresher Chews, 4 Bubble Gum.
What is the probability of pulling a Black Jack from the bag?

ANSWER: 6/15

2. Priti throws a die (singular of dice), 300 times.
Approximately, how many times would you expect Priti to throw an odd number?

ANSWER: Probability of 3/6 each throw, being $\frac{1}{2}$ or 50%, so, about 150 times.

3. Mark tosses three coins. By making a list or a table, find the probability that he will get 2 heads and one tails.

ANSWER: 3 out of 8 possible outcomes, being $\frac{3}{8}$

1 st Coin	2 nd Coin	3 rd Coin
H	H	H
H	H	T
H	T	H
H	T	T
T	H	H
T	H	T
T	T	H
T	T	T

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4. A hospital in China has calculated the probability of Accident & Emergency patients having broken bones as being a chance of 3 out of every 5 patients. If the hospital had 350 patients in a week, how many are likely to have broken bones?

ANSWER: A probability of $\frac{3}{5}$ or decimal 0.6

Therefore, $350 \times 0.6 = 210$ patients with probable broken bones.

5. Some photographers like to dabble in traditional photography using old style cameras and darkroom enlargers. A local organisation suggests the probability of photographers visiting a local shop for camera film is 1 in every 50 customers. They have a good number of customers visiting for their traditional and digital photography products. If the shop has 1,412 customers in a month, how many are solely seeking digital products?

ANSWER: A probability of $\frac{1}{50}$ or decimal 0.02 seek traditional photo products.

Therefore, $1412 \times 0.02 = 28.24$ traditional

Meaning $1412 - 28.24 = 1383.76$ (we can round this off) ... 1,384 digital only customers.