Probability & Relative Frequencies

Theoretical and Experimental Probability   Year 12

Q1. Learn with an example

question

Of the last 16 trains to pull into Riverside Station, 12 were full. What is the experimental probability that the next train to pull in will be full?

Simplify your answer and write it as a fraction or whole number.

P(full) = [   ]

key idea

The experimental probability is the number of times an event occurs out of the total number of trials.

solution

Write the experimental probability as a fraction in simplest form.

$$P(full) \ = \ \frac{full}{total}$$

$$= \ \frac{12}{16}$$

$$= \ \frac{3}{4}$$

So, P(full) = $\frac{3}{4}$

Q2. Jada is tossing bean bags at a target. She hit the target on 2 out of her last 20 tries. What is the experimental probability that Jada's next toss will be a hit?

Find P(hit). Simplify your answer and write it as a fraction or whole number.

Q3. During 14 spins, a spinner landed on blue 6 times. If you spin the spinner once, what is the experimental probability that it will land on blue?

Find P (blue). Simplify your answer and write it as a fraction or whole number.
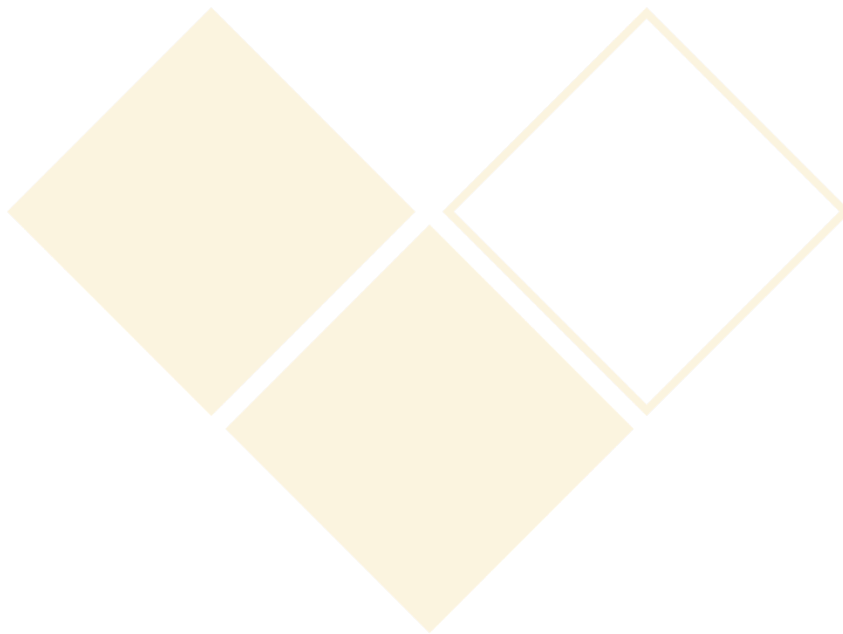
2: P(hit) =
1/10

3: P(blue)
= 3/7

For detailed working of this worksheet

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