

LESSON

9-1 Probability

Problem Solving

Write the correct answer.

1. To get people to buy more of their product, a company advertises that in selected boxes of their popsicles is a super hero trading card. There is a $\frac{1}{4}$ chance of getting a trading card in a box. What is the probability that there will not be a trading card in the box of popsicles that you buy?
2. The probability of winning a lucky wheel television game show in which 6 preselected numbers are spun on a wheel numbered 1–49 is $\frac{1}{13,983,816}$ or 0.000007151%. What is the probability that you will not win the game show?

Based on world statistics, the probability of identical twins is

$\frac{4}{1000}$, **while the probability of fraternal twins is** $\frac{23}{1000}$.

3. What is the probability that a person chosen at random from the world will be a twin?
4. What is the probability that a person chosen at random from the world will not be a twin?

Use the table below that shows the probability of multiple births by country. Choose the letter for the best answer.

5. In which country is it most likely to have multiple births?

A Japan **C** Sweden
B United States **D** Switzerland

6. In which country is it least likely to have multiple births?

F Japan **H** Sweden
G United States **J** Switzerland

7. In which two countries are multiple births equally likely?

A Australia, United States
B Canada, Switzerland
C Sweden, United Kingdom
D Japan, United States

Probability of Multiple Births

Country	Probability
Australia	$\frac{1}{72}$
Canada	$\frac{1}{85}$
Japan	$\frac{1}{120}$
United Kingdom	$\frac{1}{70}$
United States	$\frac{1}{35}$
Sweden	$\frac{1}{70}$
Switzerland	$\frac{1}{80}$