

40% of cars in a certain area are manufactured in the US.

30% are from Japan

10% are from Germany

20% are from other countries

If a car is selected at random, what is the probability that it is not US-made?

A. -0.4	Go To # 10
B. 0.4	Go To # 2
C. 0.6	Go To # 7
D. 0	Go To # 12



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If a car is selected at random, what is the probability that it is made in Japan or Germany?

A. 0.3	Go To # 12
B. 0.4	Go To # 10
C. 0.1	Go To # 4
D. not enough information	Go To # 3



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If two cars are selected at random, what is the probability that they are both from Japan?

A. 0.09	Go To # 11
B. 0.90	Go To # 5
C. 0.60	Go To # 6
D. not enough information	Go To # 8



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If three cars are selected at random, what is the probability that none of the three cars came from Germany?

A. 0.900	Go To # 5
B. 0.999	Go To # 11
C. 0.001	Go To # 8
D. 0.729	Go To # 3



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If three cars are selected at random, what is the probability that at least one of them is US-made?

A. 0.648	Go To # 6
B. 0.784	Go To # 8
C. 0.352	Go To # 9
D. cannot be determined	Go To # 13



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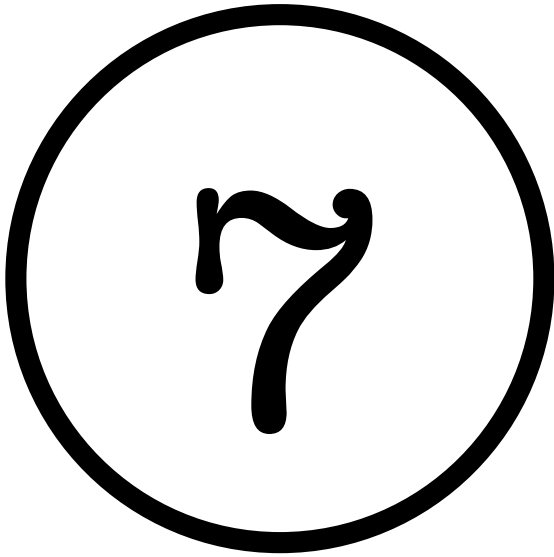
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If cars are selected at random, what is the probability that the first Japanese car is the fourth one chosen?

A. 0.0081	Go To # 1
B. 0.2401	Go To # 9
C. 0.3430	Go To # 7
D. 0.1029	Go To # 13



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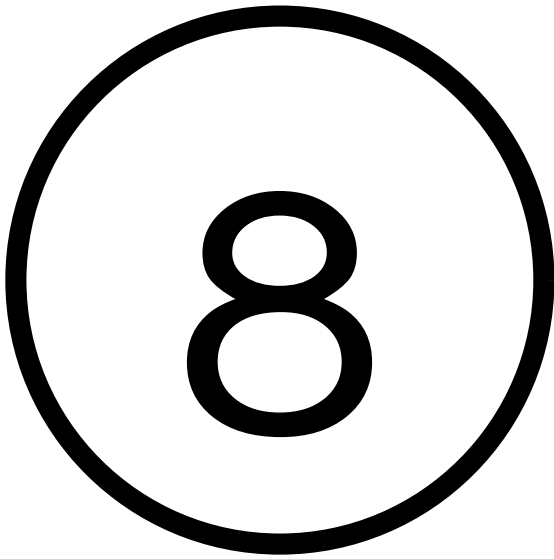
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If 18 cars are selected at random, what is the probability that exactly four are Japanese?

A. $\binom{14}{4} \cdot .3^4 \cdot .7^{14}$	Go To # 12
B. $\binom{18}{4} \cdot .3^4 \cdot .7^{18}$	Go To # 10
C. $\binom{14}{4} \cdot .3^{14} \cdot .7^4$	Go To # 4
D. $\binom{18}{4} \cdot .3^4 \cdot .7^{14}$	Go To # 2



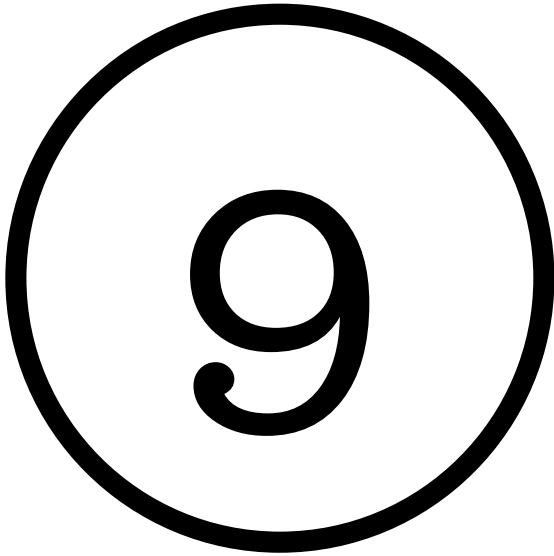
Game A: win a prize by getting EXACTLY 50% heads

Game B: win a prize by getting between 45% and 55% heads

Your choices:
Flip 20 times or flip 50 times.

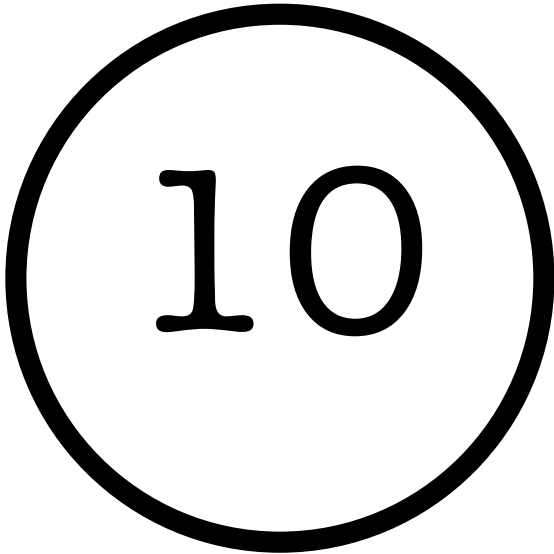
Which statement is true?

A. 50 flips for Game A is better than 20 flips, since the Law of Large Numbers says that the longer you flip a coin, the more likely you'll get exactly half heads.	Go To # 1
B. 20 flips for Game B is better than 50 flips, because a smaller sample size will produce a smaller margin for error.	Go To # 13
C. 20 flips for Game A is best, because getting exactly 10 heads out of 20 flips is more likely than getting exactly 25 heads out of 50 flips	Go To # 6
D. Both 20 flips and 50 flips have an equal chance of getting EXACTLY 50% heads.	Go To # 9



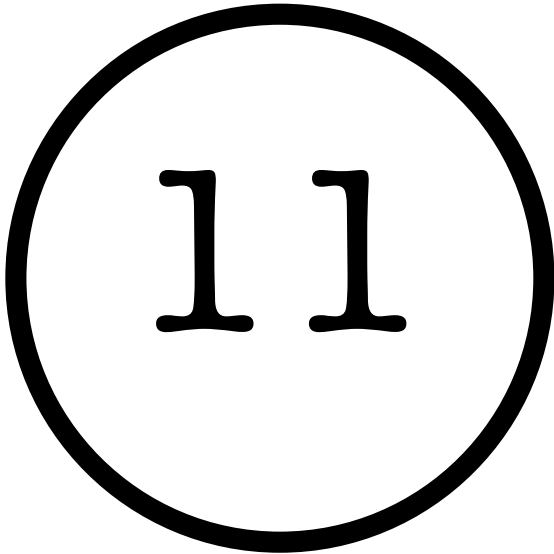
You saw a friend flip a fair coin 20 times and get 14 heads. You walk away and do not see the next 80 flips. How many heads would you expect your friend to have after 100 flips?

A. 50 heads—the coin is stated to be fair	Go To # 10
B. 50 heads—the Law of Large Numbers guarantees it.	Go To # 2
C. 54 heads—the next 80 flips should produce 40 heads (added to the first 14 heads = 54 total)	Go To # 1
D. 70 heads—based on the first 20 flips, the coin always produces 70% heads	Go To # 7



If 90% of the households in a certain region have answering machines and 50% have both answering machines and call waiting, what is the probability that a household chosen at random which is found to have an answering machine also has call waiting?

A. 0.56	Go To # 12
B. 0.45	Go To # 11
C. 0.50	Go To # 3
D. 0.44	Go To # 4

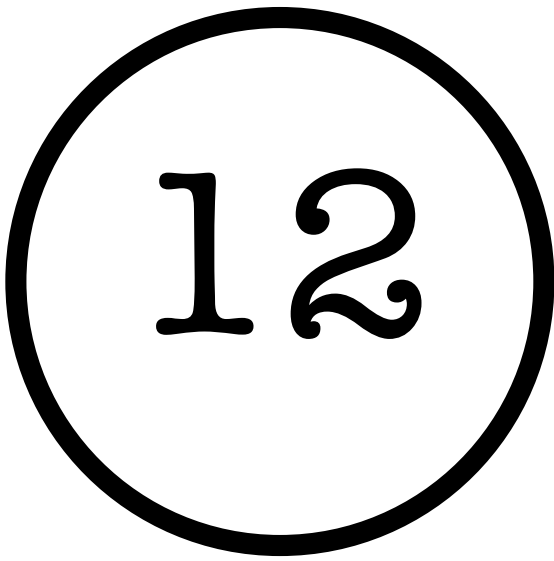


Given this data table:

	Right-Handedness	Left-Handedness	
Blue Eyes	210	30	240
Brown Eyes	670	90	760
	880	120	1000

What is the probability that a right-handed student has blue eyes?

A. $210/880$	Go To # 5
B. $(880 \cdot 240)/880$	Go To # 13
C. $210/1000$	Go To # 6
D. $210/240$	Go To # 8



When rolling 2 dice, what is the probability that the sum is 7 given that one die is a 5?

A. $2/12$	Go To # 5
B. $1/12$	Go To # 11
C. $2/11$	Go To # 4
D. $2/6$	Go To # 3

13

The weight of medium-sized tomatoes at a store is a random variable with mean = 10 oz and standard deviation = 1 ounce. Suppose you pick four tomatoes from the bin at random and put them in a sack. The weight of the sack is a random variable with mean and SD =

A. 40 oz and 4 oz	Go To # 2
B. 10 oz and 4 oz	Go To # 7
C. 40 oz and 2 oz	Go To # 9
D. 10 oz and 2 oz	Go To # 1

Key

1
7
2
10
12
4
3
11
5
8
6
13
9
(1)