

Probability Game

Instructions

Look at the set of number cards you have been given.

Imagine if somebody picked one of these cards at random – for example, by picking a card when blindfolded, or picking a card out of a bag.



What would be the probability of the following events?

Event	Probability as a fraction	Probability as a decimal	Probability as a percentage
Picking a multiple of 3			
Picking a number smaller than 12			
Picking a three-digit number			
Picking a number smaller than 50			
Picking a multiple of 10			
Picking a number larger than 120			
Picking a multiple of 4			
Picking a number larger than 7			

Probability Game

Sample answers

Look at the number cards you have been given.

1	2	4	5	10	11
12	15	20	100	125	150

Imagine if somebody picked one of these cards at random – for example, by picking a card when blindfolded, or picking a card out of a bag.

Event	Probability as a fraction	Probability as a decimal	Probability as a percentage
Picking a multiple of 3	$\frac{3}{12} = \frac{1}{4}$	0.25	25%
Picking a number smaller than 12	$\frac{6}{12} = \frac{1}{2}$	0.5	50%
Picking a three-digit number	$\frac{3}{12} = \frac{1}{4}$	0.25	25%
Picking a number smaller than 50	$\frac{9}{12} = \frac{3}{4}$	0.75	75%
Picking a multiple of 10	$\frac{4}{12} = \frac{1}{3}$	0.3333 or 0.33	33.33% or 33%
Picking a number larger than 120	$\frac{2}{12} = \frac{1}{6}$	0.1667 or 0.17	16.67% or 17%
Picking a multiple of 4	$\frac{4}{12} = \frac{1}{3}$	0.3333 or 0.33	33.33% or 33%
Picking a number larger than 7	$\frac{8}{12} = \frac{2}{3}$	0.6667 or 0.67	66.67% or 67%

Probability game – number cards

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12	15	20	100	125	150

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