

Unequal Probability:

Used when the chances of getting a particular outcome can not be compared to getting a different outcome e.g. when different numbers / quantities are involved.

Example	Number / quantity	Chance of it happening?	Probability
Picking a chocolate with a fruit centre from a box of chocolates	6 nut centres	Number of fruit centres: 5	0.35
	3 caramel centres	Total chocolates: 14	35%
	5 fruit centres	Chance = 5/14	5/14
	<u>Each quantity is different</u> so the chances of picking one over the another is <u>not equal</u>	$ \begin{array}{r} 0.3515 \\ 14 \overline{) 5.50^8 0^{20} 0} \end{array} $	
		Chance of it <u>not</u> happening?	Probability of it <u>not</u> happening?
<p>Remember: If it's definitely going to happen the probability is 1. We know the chance of it happening is 0.35 so the chance of it not happening is what's left.</p>		$1 - 0.35 = 0.65$	0.65 65%

Note: in the above example of 5/14, 5 is a prime number so this fraction will not cancel down. Fractions should be cancelled down where appropriate.