

Quality Intro to Six Sigma 170

DISCRETE VS. CONTINUOUS

A **discrete variable** is one with a well-defined finite set of possible values. Examples are: the number of dimes in a purse, a statement which is either “true” or “false”, which party will win the election, the country of origin, voltage output of a digital device, and the place a roulette wheel stops.

A **continuous variable** is one which can take on a value between any other two values, such as: indoor temperature, time spent waiting, water consumed, color wavelength, and direction of travel.

A discrete variable corresponds to a digital quantity, while a continuous variable corresponds to an analog quantity.

From this definition and the one in the text, place each one of the variables into the proper category of Continuous or Discrete.

number of inspectors present	height of inspector
weight of inspector	number of heads when flipping three coins
distance traveled between Jobs	Inspectors' grade level
number of red marbles in a jar	time it takes to get Inspection completed

A **discrete variable** is a variable whose value is obtained by counting.

A **continuous variable** is a variable whose value is obtained by measuring.



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