**Maths for Regular expressions worksheet - answers**

1. What is a Set?

An unordered collection of unique values

1. What is the cardinality of the set: ?

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1. Define a set Q consisting all the odd numbers between 1 and 9.

Q={1,3,5,7,9}

1. What is the cartesian product of and ?

{(a,c),(a,d),(b,c),(b,d)}

1. What set would the following set produce: ?

A={110011}

1. What set would the following list comprehension produce: ?

A={0,4,8}

1. If and what is

{2,4,6,8,16,32}

1. if and find C where

{(0,1),(0,2),(2,1),(2,2)}

1. What is the intersection of and ?

{6,8}

1. What is the difference of and Y

{2,4,10,3,7,1}