

TUTORIAL : PROBABILITY

$$1 \text{ a) } S = \{ FFF, FFN, FNF, FNN, NFF, NFN, NNF, NNN \}$$

$$b) n(S) = 8$$

$$2 \text{ a) } A \cap B = \{ 4, 8, 12 \}$$

$$b) C' = \{ 1, 2, 4, 5, 7, 8, 10, 11 \}$$

$$c) B \cup C = \{ 3, 4, 6, 8, 9, 12 \}$$

$$3) P(\text{odd number}) = \frac{n(\text{odd number})}{n(S)} = \frac{3}{6} = \frac{1}{2}$$

$$4) P(C \cup P) = \frac{n(C \cup P)}{n(S)} = \frac{9}{12}$$

$$5) 4/5$$

$$6) \text{ a) } P(M) = 0.6, P(C) = 0.2, P(L) = 0.08, P(B) = 0.12$$

b) Motorcycle

$$7) \text{ a) } 2/9$$

$$b) 4/27$$

$$c) 1/81$$

$$d) 2/81$$

$$8) \text{ a) } 0.3$$

$$b) 0.2$$

$$9) 5/7$$

$$10) \text{ a) } 25/37$$

$$b) 30/37$$

$$c) 9/111$$

$$d) 1/3$$