

Suppose you flip one fair coin and one biased coin whose probability of Heads is  $1/3$ . What is the probability that you get at least one Head?

- (a)  $2/3$
- (b)  $1/3$
- (c)  $3/4$
- (d)  $5/6$
- (e)  $1/2$
- (f)  $1/9$
- (g)  $2/9$
- (h)  $1/6$
- (i)  $1/4$
- (j) None of these

What is the probability that both coins are Heads given that the fair coin is Heads?

- (a)  $1/3$
- (b)  $2/3$
- (c)  $1/2$
- (d)  $1/6$
- (e)  $5/6$
- (f)  $1/4$
- (g)  $3/4$
- (h)  $1/9$
- (i)  $2/9$
- (j) None of these

What is the probability that the fair coin is Heads given that the coins are not both Heads?

- (a)  $2/5$
- (b)  $3/5$
- (c)  $1/2$
- (d)  $1/6$
- (e)  $5/6$
- (f)  $1/4$
- (g)  $2/3$
- (h)  $1/3$
- (i)  $4/5$
- (j) None of these