

## Question 26

Let  $Q(x, y)$  be the statement  $x + y = x - y$

- (a) False,  $1 + 1 \neq 1 - 1$
- (b) True,  $2 + 0 = 2 - 0$
- (c) False, since there are many values of  $y$  such that  $1 + y \neq 1 - y$
- (d) False,  $x + 2 = x - 2$  has no solution
- (e) True, when  $x = y = 0$ ,  $x + y = x - y$
- (f) True, when  $y = 0$ ,  $x + y = x - y$
- (g) True, when  $y = 0$ ,  $x + y = x - y$
- (h) False, since there is no  $x$  such that  $x + y = x - y$  for all  $y$ .
- (i) False