

# IB Statistics and Probability Problem 004

The random variable  $X$  follows the probability distribution below, where  $P(X > 1) = 0.5$ .

$x$	0	1	2	3
$P(X=x)$	$p$	$q$	$r$	0.2

- A. Find the value of  $r$ .
- B. Given that  $E(X) = 1.4$ , find the value of  $p$  and the value of  $q$ .