Question:The probability that at least one of the events A and B occurs is 0.6. If A and B occur simultaneously with probability 0.2, then $P(A') + P(B')$ is
(A) 0.4
(B) 0.8
(C) 1.2
(D) 1.6
Solution: :

TABLE 0
TABLE-1

Parameters	values	Description
$p(A + B)$	0.6	Probability that atleast one of the events occur
$p(A \cdot B)$	0.2	Probability that A and B occur simultaneously

$$\therefore p(A + B) = p(A) + p(B) - p(A \cdot B) \tag{1}$$
$$p(A) + p(B) = 0.8 \tag{2}$$
$$1 - p(A') + 1 - p(B') = 0.8 \tag{3}$$
$$\therefore P(A') + P(B') = 1.2 \tag{4}$$