An inventory manager for a firm wants to determine the mean demand for a particular product in stock during the reorder lead time (the lag between from the time the products are ordered to the time the order is received). This information is needed to determine how far in advance of a zero stock level to reorder. Both demand and lead time are random variables, defined by the following probability distributions:

Lead Time (days)	Probability P(X)
1	0.20
2	0.50
3	0.30

Demand per day	Probability P(X)
0	0.05
1	0.10
2	0.20
3	0.40
4	0.15
5	0.10

Simulate this problem for 3 reorders to estimate the mean demand during lead time. You may set the order quantity 10 units, and reorder point 5 units.