## QUIZ - MATH GRADE 12 IB SL

1. ( $100 \%$ ) In a factory that makes 40 products a day there is a probability of 0.15 that a product will be defective.
a. (5\%) Find the expected number of defective products.
b. (5\%) Find the standard deviation.
c. $(10 \%)$ Find the probability of the most probable number of defective products.
d. (10\%) Find the probability that no defective products are made
e. (20\%) Find the probability that less than 10 products are defective.
f. ( $20 \%$ ) Find the probability that at least 3 products are defective
g. (15\%) Find the probability that in 2 consecutive days exactly 1 product will be defective.
h. ( $15 \%$ ) Given that less than 6 defective product were produced, find the probability that none is defective.
