

Mathematics 3201 Information Sheet

$$n(A \cup B \cup C) = n(A) + n(B) + n(C) - n(A \cap B) - n(B \cap C) - n(A \cap C) + n(A \cap B \cap C)$$

$$n(A \cup B) = n(A) + n(B) - n(A \cap B)$$

$${}_nC_r = \binom{n}{r} = \frac{n!}{(n-r)!r!}$$

$${}_nP_r = \frac{n!}{(n-r)!}$$

$$\frac{n!}{a!b!c!\dots}$$

$$P(A \cup B) = P(A) + P(B) - P(A \cap B)$$

$$P(A \text{ and } B) = P(A) \times P(B)$$

$$P(A \cap B) = P(A) \cdot P(B | A)$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$A = P(1+i)^n$$

$$A = P(1+rt)$$