2. Formatting Equations

Q1
$$y = ax + b$$

Q2 $y = ax^2 + bx + c$
Q3 $log_e(x) = sin(y)$
Q4 $sin^2x + cos^2x = 1$
Q5 $A\vec{x} = \vec{x}\lambda$
Q6 $\sum_{i=1}^{N} x^i$
Q7 $\int_0^{\infty} e^{-2i\pi x} dx$
Q8 $\bar{x} = \frac{\sum_{i=1}^{N} x_i}{N}$
Q9 $s^2 = \sqrt{\frac{\sum_{i=1}^{N} (x_i - \bar{x})^2}{N-1}}$
Q10 $\mu = \int xp(x)dx$
Q11 $\sigma^2 = \int (x - \mu)^2 p(x)dx$