Question 1 (8 marks)

(a) For the functions below, determine $\frac{\mathrm{d}y}{\mathrm{d}x}$. You do not need to simplify your answers.

(i) $y = 3\cos(2+7x)$.

(2 marks)

(ii) $y = \frac{5x+2}{x\sqrt{x}}$.

(3 marks)