Line l_1 has equation $\sqrt{3}y - x = 0$.

(a) Line l_2 is perpendicular to l_1. Find the gradient of l_2. **2**

(b) Calculate the angle l_2 makes with the positive direction of the x-axis. **2**

Answers:

(a) $-\sqrt{3}$

(b) $\theta = \dfrac{2\pi}{3}$ or $120°$