Higher Maths question bank :: Paper 1

19. Trig integration

1. Evaluate
$$\int_0^{\pi/3} \cos\left(2x - \frac{\pi}{6}\right) dx$$

2. Evaluate
$$\int_0^{\pi} \cos\left(3x + \frac{\pi}{6}\right) dx$$

3. Evaluate
$$\int_{-\pi}^{\pi} \sin\left(2x + \frac{\pi}{4}\right) dx$$

4. Evaluate
$$\int_{\pi/6}^{\pi/3} -2 \sin\left(2x - \frac{\pi}{6}\right) dx$$

5. Evaluate
$$\int_{2\pi}^{5\pi/2} -\cos(3x) \, dx$$