## 7A Part 2 First Order Differential Equations and Integrating Factors

Notes:
Solve the general equation:

$$
\frac{d y}{d x}+P y=Q
$$

Where $P$ and $Q$ are functions of $x$.

1. Find the general solution of the equation:

$$
\frac{d y}{d x}-4 y=e^{x}
$$

2. Find the general solution of the equation:

$$
\cos x \frac{d y}{d x}+2 y \sin x=\cos ^{4} x
$$

