Electrolysis of water

$2\ H_2O \rightarrow O_2 + 4\ H^+ + 4\ e^-$ 2.5 A, 3.2 g O_2

$$3.2\ g\ O_2 \times \frac{1\ mol\ O_2}{32\ g\ O_2} \times \frac{4\ mol\ e^-}{1\ mol\ O_2} \times \frac{96500\ C}{1\ mol\ e^-} = 38600\ C$$

$$2.5\ \frac{C}{s} \times s = 38600\ C \qquad s = 15440\ s$$

$$15440\ s \times \frac{1\ min}{60\ s} \times \frac{1\ hr}{60\ min} = 4.3\ hr$$