Exercise 2 - Sample Solution (4 golf balls in cardboard box container)

Physical
Model
$\underset{k x \rightarrow}{84}$


Maths Model

$$
\begin{aligned}
& x\left(\frac{1}{2} x\right)=\frac{1}{2} x^{2} \\
& 4\left(\frac{1}{2} x^{2}\right)=2 x^{2}
\end{aligned}
$$



$$
\begin{aligned}
\text { Area } & =2 x^{2}+2 x^{2} \\
& =4 x^{2} \\
& =4(48)^{2} \\
& =9216 \mathrm{~min}
\end{aligned}
$$

$$
\begin{aligned}
& A=x y \\
& x / y
\end{aligned}
$$

