| a) $P$ is directly proportional to $Q$ and $P=10$ when $Q=2$ | b) $P$ is directly proportional to $Q$ and $P=12$ when $Q=4$ | c) $P$ is directly proportional to $Q$ and $P=36$ when $Q=9$ |
| :---: | :---: | :---: |
| i) Find the equation linking $P$ and $Q$ <br> ii) Find the value of P when $\mathrm{Q}=11$ | i) Find the equation linking $P$ and $Q$ <br> ii) Find the value of $P$ when $Q=11$ | i) Find the equation linking $P$ and $Q$ <br> ii) Find the value of $P$ when $Q=11$ |
| i) $\begin{aligned} & \mathrm{P}=\mathrm{kQ} \\ & 10=\mathrm{k} \times 2=2 \mathrm{k} \\ & \mathrm{k}=5 \\ & \mathrm{P}=5 \mathrm{Q} \end{aligned}$ | i) $\begin{aligned} & \mathrm{P}=\mathrm{kQ} \\ & 12=\mathrm{k} \times 4=4 \mathrm{k} \\ & \mathrm{k}=3 \\ & \mathrm{P}=3 \mathrm{Q} \end{aligned}$ | $\text { i) } \begin{aligned} \mathrm{P} & =\mathrm{kQ} \\ 36 & =\mathrm{k} \times 9=9 \mathrm{k} \\ \mathrm{k} & =4 \\ \mathrm{P} & =\ldots \ldots \mathrm{Q} \end{aligned}$ |
| ii) $\begin{aligned} & P=5 \times 11 \\ & P=55 \end{aligned}$ | $\text { ii) } \quad \begin{aligned} & \mathrm{P}=3 \times 11 \\ & \mathrm{P}=\ldots \ldots . . . . \end{aligned}$ | ii) $\begin{aligned} & P=\ldots \ldots . . \times \ldots \ldots . . \\ & P=\ldots \ldots . . . \end{aligned}$ |
| d) $P$ is directly proportional to $Q$ and $\mathrm{P}=10$ when $\mathrm{Q}=4$ <br> i) Find the equation linking $P$ and $Q$ <br> ii) Find the value of $P$ when $Q=11$ | e) $P$ is directly proportional to $Q$ and $P=24$ when $Q=16$ <br> i) Find the equation linking $P$ and $Q$ <br> ii) Find the value of $P$ when $Q=11$ | f) $P$ is directly proportional to $Q$ and $P=48$ when $Q=3$ <br> i) Find the equation linking $P$ and $Q$ <br> ii) Find the value of $P$ when $Q=11$ |
| $\text { i) } \begin{aligned} \mathrm{P} & =\mathrm{kQ} \\ 10 & =\mathrm{k} \times 4=4 \mathrm{k} \\ \mathrm{k} & =\ldots \ldots \ldots . . \\ \mathrm{P} & =\ldots \ldots \mathrm{Q} \end{aligned}$ | i) $\begin{aligned} & \mathrm{P}=\mathrm{kQ} \\ & \ldots \ldots .=\mathrm{k} \times \ldots \ldots .=\ldots \ldots . . \mathrm{k} \\ & \mathrm{k}=\ldots \ldots \ldots . \\ & \mathrm{P}=\ldots \ldots \mathrm{Q} \end{aligned}$ |  |
| ii) $\begin{aligned} & P=\ldots \ldots . \times \ldots \ldots . . \\ & P=\ldots \ldots \ldots . \end{aligned}$ | ii) $\begin{aligned} & \mathrm{P}=\ldots \ldots . \times \ldots \ldots . . \\ & \mathrm{P}=\ldots \ldots \ldots . \end{aligned}$ |  |

