a) P is inversely proportional to Q^2 and $P = 18$ when $Q = 2$ i) Find the equation linking P and Q ii) Find the value of P when $Q = 4$	b) P is inversely proportional to Q^2 and $P = 12$ when $Q = 3$ i) Find the equation linking P and Q ii) Find the value of P when $Q = 6$	c) P is inversely proportional to Q^3 and $P = 8$ when $Q = 6$ i) Find the equation linking P and Q ii) Find the value of P when $Q = 3$
i) $P = \dfrac{k}{Q^2}$ $14 = \dfrac{k}{2^2}$ $k = 18 \times 4 = 72$ $P = \dfrac{72}{Q^2}$ ii) $P = \dfrac{72}{4^2}$ $P = 4.5$	i) $P = \dfrac{k}{Q^2}$ $12 = \dfrac{k}{3^2}$ $k = 12 \times 9 = 108$ $P = \dfrac{108}{Q^2}$ ii) $P = \dfrac{108}{6^2}$ $P = \ldots\ldots$	i) $P = \dfrac{k}{Q^3}$ $8 = \dfrac{k}{6^3}$ $k = 8 \times 216 = 1728$ $P = \dfrac{1728}{Q^3}$ ii) $P = \dfrac{1728}{\ldots\ldots}$ $P = \ldots\ldots$
d) P is inversely proportional to $\sqrt{Q}$ and $P = 12$ when $Q = 64$ i) Find the equation linking P and Q ii) Find the value of P when $Q = 25$	e) P is inversely proportional to $\sqrt[3]{Q}$ and $P = 10$ when $Q = 27$ i) Find the equation linking P and Q ii) Find the value of P when $Q = 8$	f) P is inversely proportional to Q^3 and $P = 20$ when $Q = 2$ i) Find the equation linking P and Q ii) Find the value of P when $Q = 4$
i) $P = \dfrac{k}{\sqrt{Q}}$ $12 = \dfrac{k}{\sqrt{64}}$ $k = 12 \times 8 = \ldots\ldots$ $P = \dfrac{}{\sqrt{Q}}$ ii) $P = \dfrac{}{}$ $P = \ldots\ldots$	i) $P = \dfrac{k}{\sqrt[3]{Q}}$ $\ldots\ldots = \dfrac{k}{}$ $k = \ldots\ldots \times \ldots\ldots = \ldots\ldots$ $P = \dfrac{}{Q}$ ii) $P = \dfrac{}{}$ $P = \ldots\ldots$	

BACKWARD FADED MATHS