

If you have followed these three examples you can now work through the following exercises.

1: Make x the subject of the expression, $y = \sqrt{\frac{x}{4} + c}$.

Ans: $x = 4(y^2 - c)$

2: Make r the subject of the expression, $F = G \frac{m_1 m_2}{r^2}$.

Ans: $r = \sqrt{\frac{Gm_1 m_2}{F}}$

3: Make p the subject of the expression, $(p + \frac{a}{v^2})(v - b) = RT$.

Ans: $P = (\frac{RT}{v-b}) - \frac{a}{v^2}$

Fact File 10.1: Philosophy - Emmanuel Kant (1724 - 1808)

A German philosopher whose early work the *Theory of the Heavens* examines metaphysics as a result of the work of Newton. During his *critical period* he developed his doctrine of transcendental idealism and in his *Critique of Pure Reason* he explored the limitation of reason by which people interpret experience. He also went on to develop the *Critique of Practical Reason* and *Critique of Judgement* dealing with ethics and aesthetics. Kant maintained there was an *absolute moral law* which cannot be modified.

