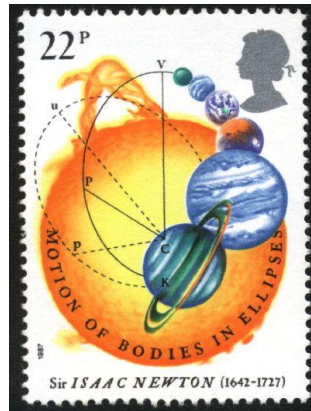


WORKSHEETS: MATH 161



[Worksheet I](#) (algebra problems from *Hall & Knight*)

[Worksheet II](#) (more about functions: graphing rational functions; introducing hyperbolic functions)

[Worksheet III](#) (limits & continuity, *Intermediate Value Theorem, Sandwich Theorem*)

[Worksheet IV](#) (trigonometric limits; one-sided limits; $(\sin x)/x \rightarrow 1$ as $x \rightarrow 0$)

[Worksheet V](#) (average rate of change)

[Worksheet VI](#) (interpreting the derivative)

[Worksheet VII](#) (shortcuts!)

[Worksheet VIII](#) (higher-order derivatives)

[Worksheet IX](#) (chain rule, implicit differentiation, log differentiation, inverse trig fncs)

[Worksheet X](#) (parametric equations)

[Worksheet XI](#) (related rates)

[Worksheet XII](#) (shape of curves: concavity, curve sketching, finding local/global extrema; *Extreme Value Theorem*)

[Worksheet XIII](#) (optimization)

[Worksheet XIV](#) (*l'Hôpital's rule*)

[Worksheet XV](#) (anti-derivatives; *Rolle's Theorem*; *Mean Value Theorem*; initial value problems; indefinite intervals)

[Worksheet XVI](#) (*Newton's method*)

[Worksheet XVII](#) (Riemann sums)

[Worksheet XVIII](#) (the Riemann integral)

[Worksheet XIX](#) (*Fundamental Theorem of Calculus*)

[Worksheet XX](#) (Area between curves)

[Worksheet XXI](#) (substitution and the *Change of Variable theorem*)

Work! God wills it. That, it seems to me, is clear.

- *Gustave Flaubert* (letter to Louise Colet, 1845)

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