# Exact solutions on a stated interval

## Key skills | Free preview

Learning target: Solve elementary circular, exponential and logarithmic equations on an interval using suitable graphical, numerical and analytic methods.

Solving a transformed function equation starts by isolating the basic function. Circular equations can have several solutions on an interval, so use reference angles and periodicity, then check every candidate against the original bounds. Logarithmic equations require positive arguments. Exponential and logarithmic inverses give exact answers that can be checked by substitution.

## Try the mathematics

Task 1. Solve $2\sin x+1=2$ for $0\leq x\leq 2\pi$. Show why your list is complete.

## Continue with the full worksheet

The complete resource has 2 focused task sets and substantive worked solutions. Use an exercise book or print the A4 worksheet. This preview shows the first task without its full solution.

Find this resource: https://resources.aspiretopowerlearning.com.au/vce/skills/aspire-mm-u2-o1-ks-04/

## Study-design reference

VCE Mathematics Study Design 2023-2027, version 1.1 (November 2022). Mathematical Methods; Unit 2; Outcome 1; Key skills; bullet 4; p. 55.

The learning target is a concise paraphrase. Aspire reference: aspire-mm-u2-o1-ks-04. This is an internal identifier, not an official VCAA code.

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