Basic Coordinate Geometry.

Straight line $y = mx + c$ gradient m
$\perp^r$ line has gradient $-\frac{1}{m}$.

Often this, together with substituting the coordinates
of a point through which the line passes, helps in the
solution

Intersection of straight lines with curves usually involves
solving the equation of the line simultaneously with that
of the curve.

It is also helpful to know how curves change when
x or y has an additive value, and when x or y
is scaled. This comes in other questions as well not
in this set of worked examples (eg Trig equations)