

6.1 Linear graphs

- Find the gradient and y -intercept from a linear equation.
- Rearrange an equation into the form $y = mx + c$.
- Compare two graphs from their equations.
- Plot graphs with equation $ax + by = c$.

6.2 More linear graphs

- Sketch graphs using the gradient and intercepts.
- Find the equation of a line, given its gradient and one point on the line.
- Find the gradient of a line through two points.

6.3 Graphing rates of change

- Draw and interpret distance–time graphs.
- Calculate average speed from a distance–time graph.
- Understand velocity–time graphs.
- Find acceleration and distance from velocity–time graphs.

6.4 Real-life graphs

- Draw and interpret real-life linear graphs.
- Recognise direct proportion.
- Draw and use a line of best fit.

6.5 Line segments

- Find the coordinates of the midpoint of a line segment.
- Find the gradient and length of a line segment.
- Find the equations of lines parallel or perpendicular to a given line.

6.6 Quadratic graphs

- Draw quadratic graphs.
- Solve quadratic equations using graphs.
- Identify the line of symmetry of a quadratic graph.
- Interpret quadratic graphs relating to real-life situations.

6.7 Cubic and reciprocal graphs

- Draw graphs of cubic functions.
- Solve cubic equations using graphs.
- Draw graphs of reciprocal functions.
- Recognise a graph from its shape.

6.8 More graphs

- Interpret linear and non-linear real-life graphs.
- Draw the graph of a circle.