

1 Functions and rates of change – Part 1

—Answers

Answers

Work through these after you have tried the questions yourself.

2.1 the domain is the set of allowed inputs; the range is the set of possible outputs.

2.2 $\frac{f(4) - f(0)}{4 - 0} = \frac{13 - 1}{4} = 3$ (the gradient of the line).

2.3 $\frac{f(5) - f(2)}{5 - 2} = \frac{25 - 4}{3} = \frac{21}{3} = 7$.

2.4 increasing.

2.5 a linear function is a straight line, so the slope between any two points is the same, giving a constant average rate of change.