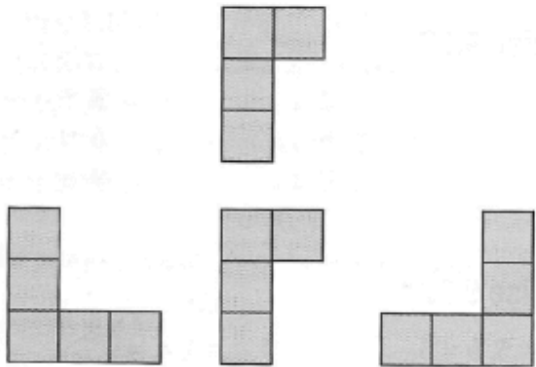


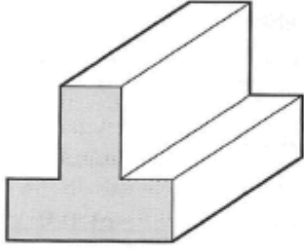
Review 1A

- 1 a) (i) 4 (ii) 5 (iii) ≈ 4.6
 b) (i) 6 (ii) 7 (iii) ≈ 6.1
- 2 a) 3^8 b) 7^4
 c) 4^{12} d) 3^{11}
- 3 a) (i) $6a(2b-1)$
 (ii) $12a+4b-2$
 b) (i) $5b(3c+4)$
 (ii) $10b+6c+8$
- 4 a) $4(4p-9q)$ b) $5(2a+5b)$
 c) $14(4d-3e)$ d) $6(a-3b+2c)$
 e) $4b^2(a-3b)$ f) $a^2(a^2-a+1)$
- 5 a) $q = \frac{2p+4}{3}$ b) $p = \frac{5q-6}{4}$
 c) $y = \frac{3z-2x}{4}$
- 6 a) $a = 75^\circ$ angles of a quadrilateral sum to 360°
 b) $b = 48^\circ$ base angles of an isosceles triangle are equal
 c) $c = 84^\circ$ angles of a triangle sum to 180°
- 7
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- 8 a) (i) Student's sketch of cuboid with plane of symmetry drawn
 (ii) 3 (or 5 if the cross-section is a square)
 b) (i) Student's sketch of cylinder with plane of symmetry drawn
 (ii) An infinite number
- 9 a)–c) Student's construction
 d) 9 cm^2
- 10 a) 670 kg b) 180 km
- 11 a) Student's example of primary data, e.g. questionnaire
 b) Student's example of secondary data, e.g. internet search on age profile of fast-food customers
 c) Student's questionnaire with five suitable questions
- 12 a) 12.345 b) 3720

Review 1B

1

x	+9	+6	+3	+2	+1	-1	-2	-3	-6	-9
y	2	3	6	9	18	-18	-9	-6	-3	-2

- 2 a) a^{10} b) b^4 c) c^3
 d) d e) 1
- 3 a) $(a-b)(f-g)$
 b) $(a+c)(a-b^2)$
- 4 a) $5\frac{1}{2}$ b) $\frac{1}{8}$
 c) 5 d) 5
- 5 a) $\frac{3}{10}$ b) $\frac{9a}{25}$
 c) $\frac{7ab}{4xy}$ d) $\frac{7b}{30x}$
- 6 $a = 48^\circ$ angles of a triangle sum to 180°
 $b = 132^\circ$ angles on a straight line to 180°
 $c = 42^\circ$ base angles of an isosceles triangle are equal
- 7
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- 8 a) Student's construction of a regular hexagon
 b) Student's construction of a regular octagon
- 9 Student's estimates. Answers may vary considerably.
- 10 Student's explanation. For example:
 To ensure that any potential problems are identified and resolved beforehand.
- 11 a) 60 cm b) 225 cm^2
- 12 a) 270 km b) 1055