

Answers to Intermediate 1 Home Exercises

Home Exercise 1 (page 25)

1. a 50 b 120 c 400
2. a 500 b 1300 c 2400
3. a 8000 b 47000 c 80000
4. a 600000 b 4800000
c 12000000 d 600000000
e 400 f 20
g 300 h 200
5. a $\frac{37}{100}$ or 0.37
6. a $\frac{9}{20}$ b $\frac{4}{5}$ c $\frac{16}{25}$
7. a His - 80%, Mod Stud - 75%. History
8. a 40% b 35%
9. a £10.80 b 792 g
c 189 ml d \$108
10. £3480
11. £126.50
12. £56.25 - £105.75 - £18.51 - £124.26
13. a £2080 b £1560
14. 4.4 kg/pig
- 15/ 187.5 miles
16. 900 tiles

Home Exercise 2 (page 44)

1. a 9000 b 23000 c 40000
2. a 600000 b 48000000
c 400 d 200
3. a $\frac{17}{20}$ b $\frac{3}{5}$ c $\frac{9}{25}$
4. Theory - 80%, Practical - 75%. Theory
5. a £12.60 b 936 kg
c £322 d £2640
6. a £1560 b £520
7. 600 m
8. 33 mm
9. 9 cm
10. 81.64 mm
11. a 56 cm b 131.88 m
12. a 12.336 m b 65.27 m
13. £308
14. a 803.84 cm²
b 379.94 mm²
15. 442.08 m²

Home Exercise 3 (page 120)

1. a (-2, -3)
2. -14°C
3. -£40
4. a -3 b 4 c -8
d 12 e -5 f -21
g 16 h 36 i -4
j -3 k 3 l 16
5. a 240 mph b 1.5 hr c 88 miles
6. a 2.5 hr b 4.75 hr
7. a 1 hr 30 m b 6 hr 15 m
8. 5 hr 15 m b 80 mph
9. 3 hr 30 m
10. 12.5 cm
11. 15 mm
12. x = 13.0 m y = 20.1 mm
13. 1.19 m
14. h = 21.9 cm area = 263.2 cm²
15. 20.5 cm

Home Exercise 4 (page 147)

1. -14°C
2. -£40
3. a -10 b 6 c 14
d 4 e -28 f -5
g 30 h 3 i 36
4. a 240 mph b 1.5 hr c 88 miles
5. a 5 hr 15 m b 80 mph
6. 3 hr 30 m
7. x = 13.0 m y = 20.1 mm
8. 1.19 m
9. a 10 mins b 13.5 min c 15.9 min
10. a 23 b 40
11. 11
12. a 30 b 10
13.
$$\begin{array}{r|l} 2 & 2\ 8\ 9 \\ 3 & 6\ 7\ 8 \\ 4 & 0\ 2\ 3\ 9 \\ 5 & 1\ 3\ 5\ 5\ 5\ 8 \\ 6 & 0\ 1 \end{array} \quad 3 \mid 6 = 36$$

Home Exercise 5 (page 186)

1. a 40 b 21 c 140
 d 4 e 64 f 181
2. a $4m + 8$ b $6a + 6b$ c $16r - 24s$
3. a $8a + 15$ b $5x - 14$
 c $3m + 14$ d $4p + 15$
4. a $3(m + 2)$ b $5(a - 4)$ c $4(r + 3s)$
 d $5(2g + 3)$ e $6(2x - 3y)$ f $a(t + s)$
5. a 4 b 5 c 7
 d 6 e 8 f 20
 g 7 h 5 i 8
6. a $g > 3$ b $m < 13$ c $u \geq 9$
 d $t < 6$ e $n > 1$ f $p \leq 12$
7. a 0, 4, 8, 12
 b (0, 0), (1, 4), (2, 8), (3, 12)
 c see graph
 d see line
8. a 3, 5, 7, 9
 b (0, 3), (1, 5), (2, 7), (3, 9)
 c see graph
 d see line
9. a 8, 6, 4, 2
 b (-2, 8), (0, 6), (2, 4), (4, 2)
 c see graph
 d see line
10. a 4, 1, -2, -8
 b (-1, 4), (0, 1), (1, -2), (3, -8)
 c see graph
 d see line
11. $a = 12.6$ cm, $b = 4.98$ mm, $c = 17.6$ cm
12. $p = 54.5^\circ$, $q = 48.6^\circ$, $r = 36.9^\circ$
13. 41.4°
14. 13.8 cm