

- c -£5 d -£14 e -£16 f -£105  
g £27 h -£1.80 i £2250 j £192

### Chapter 8 - Exercise 2 (page 83)

See drawing

- a 19°C b 12°C c 21°C d 6°C  
e 10°C f 2°C g -10°C h 5°C  
i -7°C j -18°C k -19°C l -21°C  
m -3°C n -1°C  
a 6°C up b 5°C down  
c 15°C down d 9°C up  
e 9°C down f 15°C up  
g 7°C down h 13°C down  
i 80°C up j 12°C down  
-15°C  
44°C  
49°C  
a 1°C b -3°C c -7°C d -31°C  
a -21°C, -2°C, -1°C, 0°C, 1°C, 18°C  
b -58°C, -36°C, -17°C, -9°C, -2°C, 2°C,

### Chapter 8 - Exercise 3 (page 84)

- a 15 b 16 c 14 d 2  
e 7 f 0 g -3 h -6  
i -16 j 8 k 0 l 17  
m -6 n -8 o -9 p -22  
q -18 r -22 s -11 t -6  
a 7 b 0 c 19 d -6  
e -5 f -10 g -25 h -8  
i -7 j -24 k -24 l -27  
m -20 n -41 o -300 p -200  
a 13 b -4 c -10 d 10  
e -12 f -2 g -14 h -52  
i 15 j -46 k -17 l -23  
m 9 n -1 o 0 p -24  
a 5 b 0 c 2 d -2  
e -20 f -14 g 4 h -1  
i -18 j -1 k -50 l -900  
a 14 b 17 c -2 d -3  
e -20 f 3 g 0 h -3  
i -6 j 20 k 40 l -1000  
a 8 b 5 c 11 d 4  
e 5 f 3 g 4 h -4

### Answers to CHAPTER 9 (Page 87)

### Chapter 9 - Exercise 1 (page 87)

- a 6 miles b 12 miles  
c 200 miles d 6 miles  
e 45 miles f 1 mile  
a 210 miles b 500 miles  
c 1520 miles d 30 miles  
e 330 miles f 160 miles  
a 100 km b 360 km  
c 170 km d 6 km  
e 180 km f 50000 km  
1260 km  
60 miles

### Chapter 9 - Exercise 2 (page 88)

- a 4 hr b 3 hr c 4 hr d 10 hr  
e 3 hr f 9 secs g 3 hr h 4 hr  
a 1.30 pm  
b 11.55 pm  
c 0210 next morning  
a 1 hr b 2 hr c 2 hr d 5 hr  
a 135 miles b 172 miles  
a 3 hr b 3 hr d 4 hr  
a 3 hr b 9.45 am  
a 9 hr b 0630 Monday  
a 5 hr b 7 hr c 11 hr d 15 hr

9. Cyprus, England, Japan, Hawaii, France, Cuba, United Arab Emirates, Australia.

10. Yes with 30 mins to spare  
11. a two and a half hours  
b three and a half hours  
c two and a quarter hours

### Chapter 9 - Exercise 3 (page 90)

1. a 3 mph b 10 mph c 30 mph  
d 50mph e 75 kph f 80 kph  
2. a 8 kph b 80 kph c 10 metres per sec  
d 7 mps e 200 mph f 60 metres per min  
3. a 90 mph b 364 mph c 68 mph  
d 4 mph e 13 mph f 15 mph  
g 75 mph h 430 mph i 3.5 mph  
4. a 16 kph b 16 kph c 100 mph d 2 mph  
e 50 mph f 3 mps g 0.5 mph h 30 mps  
5. 13 mph  
6. a 3 hrs b 369 mph  
7. 18 mph  
8.  $(30 + 30) \div (2 + 3) = 12$  mph  
9. a 498 mph b 468 mph  
c 792 km/hr d 756 km/hr  
10. South Africa, USA, Russia, USA, Cuba, Italy, Canada, China  
11. a 12 km/hr b 6 km/hr  
c 800 km/hr d 80 words/min

### Chapter 9 - Exercise 4 (page 92)

1. a 23 mph b 4 hr  
c 260 miles d 20 mph  
e 24 hr f 2156 miles  
g 8 hr  
2. 157 km  
3. 18 mph  
4. 18 minutes  
5. 560 km/hr  
6. 9 hours  
7. 64000 miles  
8. a 154 metres per minute b 2 mins  
9. 1880 miles  
10. 20 minutes  
11. a 3000 metres per hr b 50 m  
12. a half a mile per hour  
b two and a half mph - 5 times as fast  
13. a (20 02 2002) (01 02 2010), (11 02 2011) ...  
b (10 02 20 02 2001) (10 02 30 03 2001) (10 02 11 11 2001), .....

### Answers to CHAPTER 10 (Page 96)

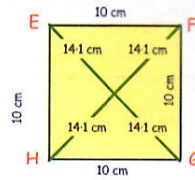
### Consolidation of 2-D Work (page 96)

1. a hexagon b decagon  
2. rectangle, isosceles triangle, equilateral triangle, pentagon, square, semi-circle  
3. a scalene b equilateral  
c isosceles  
4. a acute b right c obtuse  
5. a obtuse angle isosceles triangle  
b right angle scalene triangle  
c acute angles isosceles triangle  
6. 13 cm  
7. see drawing

### Chapter 10 - Exercise 1 (page 97)

1. a yes b yes c yes d 4  
e (i) yes (ii) yes f 8 g yes  
h yes i yes j yes  
2. a various

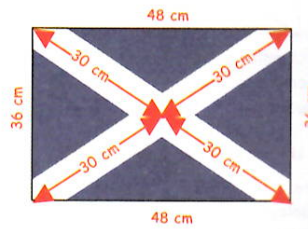
- 3 a/b



4. a/b 9.9 cm  
5. a/b 5.7 cm  
6. a/b 7.8 cm  
7. a sides are 6 cm b diags are 8.5 cm  
8. a 16 cm<sup>2</sup> b 100 cm<sup>2</sup>  
c 6.25 cm<sup>2</sup> d about 32 cm<sup>2</sup>  
9. a 7 cm b 28 cm  
10. 135°

### Chapter 10 - Exercise 2 (page 99)

1. a no b yes c yes d yes  
e 2 f (i) yes (ii) no  
g 4 h yes i yes  
j no k no  
2. various  
3.



4. a/b 10 cm  
5. various  
6. various  
7. a possibly 8 cm by 2 cm  
b possibly 7 cm by 3 cm  
c possibly 6 cm by 4 cm  
d a square  
8. 21 cm<sup>2</sup>  
9. a 120 cm<sup>2</sup> b 84 cm<sup>2</sup>  
c 70 cm<sup>2</sup>  
10. 90cm<sup>2</sup>  
11. a possibly 9 cm by 3 cm  
b 11 by 1, 10 by 2, 7 by 5, 6 by 6  
c 11 cm<sup>2</sup>, 20 cm<sup>2</sup>, 27 cm<sup>2</sup>, 32 cm<sup>2</sup>,  
35 cm<sup>2</sup>, 36 cm<sup>2</sup>  
d the one measuring 6 cm by 6 cm  
e a square - possibly always the square.

### Chapter 10 - Exercise 3 (page 101)

1. a yes b yes c no d yes  
e 2 f (i) yes (ii) no g 4  
h no i yes j yes k yes  
2. various  
3. a 13 mm b 5 mm and 12 mm  
4. see drawing  
5. a/b 4.5 cm  
6. see drawing  
7. a see drawing b a square

### Chapter 10 - Exercise 4 (page 102)

1. a no b no c yes d no  
e no f no g yes h 1  
i no j 2  
2. a no b no c yes  
d yes e no f yes  
3. various