Section A

1	(a) Axes scaled consistently		[1]	
		Histogram All heights correct Bars correctly positioned with no gaps	[1] [1]	Accuracy ± 2 mm
		OR		
		Frequency polygon Heights correct Points plotted at mid intervals and ruled lines	[1] [1]	Accuracy ± 2 mm
	(b)	$\frac{23}{60}$ i.s.w. (but not subtraction from 1)		
		or 0.38 or 38%	[2]	W1 for 23 seen
2	(a)	The train stops or equivalent	[1]	
	(b)	Ruled line from York(11 00) to London (13 15)	[2]	Allow ±2 mm at each end W1 for freehand line or W1 for one end correct OR W1 for ruled line from London to York with both ends correct.
3		0.43[p] or 43[p]	[4]	W3 for figs 215 seen or W2 for figs 228 seen or W1 for figs 162 or figs 66 seen and M1 for (their 215) ÷ 5
4	(a) –	8	[2]	W1 for $[(-2)^2 =]$ 4 or -12 seen
	(b)	Final answer $a(a+6)$	[1]	
5	(a)	[×]3 or $\frac{3}{1}$	[1]	
	(b)	(0,2)	[1]	

- 6 (a) (i) Final answer $\frac{3}{20}$ o.e. or 0.15 [1] (ii) Final answer $\frac{4}{5}$ o.e. or 0.8 [1]
 - (b) $\frac{21}{25}$ o.e. with one relevant correct change [2] **W1** for one relevant correct change
- 7 145°

 [2] W1 for 35 seen
 or
 M1 for 360 (83 + 115 + 127)
 OR (exterior angle method).
 W1 for two of 97, 65 and 53
 seen or
 M1 for 360 (97 + 65 + 53) f.t

 [Angles in a] quadrilateral [= 360°]
 [Angles on a] straight line [= 180°]

 [1] Exterior angles [= 360°]

Section B

8 (a) A

[1]

(b) D

[1]

9 (a) 4.6 o.e.

[1]

(b) 11.3

[2] W1 for figs 112[7...] or figs 113 seen or W1 for answer – 2.6 or W1 for figs 2401 seen

10 (a) 3

[1]

(b) 5.5 or $5\frac{1}{2}$ or $\frac{11}{2}$ i.s.w.

- [2] **M1** for 2x = 6 + 5 or
 - **W1** for answer $\frac{1}{2}$ or 0.5

(c) -2

[3] W1 for 8x + 36 seen and M1 8x = 20 - 36 f.t. OR M1 for 2x + 9 = 5 and M1 for 2x = 5 - 9 f.t.

11 (a) £10440

[3] **M2** for $\frac{100-28}{[100]} \times 14500$

implied by figs 1044 or

M1 for $\frac{28}{[100]} \times 14500$ implied by 18560 or figs 406

(b) 26.25

- [2] **W1** for 8.75 **or**
 - **M1** for $\frac{35}{1+3}$ (×3) implied by figs 262, 263, 2625

2330	6		Mark Scheme		June 2006
12	(a)	(i)	Angle CBA = 55 to 59° BC = 8.3 to 8.7 cm (Ruled)	[1] [1]	
		(ii)	If the construction is correct:		
			14.6 to 15.6 km	[2]	W1 for 7.3 to 7.8 seen or W1 for 31 + their AC
			If the construction is incorrect:		WI IOI 31 + (Hell AC
			f.t. from their diagram		W2 for their AC x 2 (Allow ± 0.4km) or W1 for their AC stated (Allow ± 0.2cm) or W1 for 31 + their AC
	(b)	1 h	15 min	[3]	W2 for 1.25 seen or for answer 1 hour 25 minutes or 75 minutes or M1 for 14 ÷ 11.2 or figs 125

[2]

M1 for $\pi \times 6.5$ or

W1 for answer 40.8 to 40.9

13

20.4 to 20.45