

[1] Allow in part (b)

[1] Results must be seen

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In each case accept results
truncated or corrected to
1 sig fig or better

[1]

4

[2] W1 for 2 terms correct or
W1 for $x^2 - 4x - 3x + 12$

[2] W1 for partial factorisation
i.e. w.

4

[3] W2 for 87.5%
M2 for $\frac{450 - 393.75}{450}(\times 100)$ or

M1 for $\frac{393.75}{450}(\times 100)$ or

W1 for 56.25 seen

[3] M2 for $\frac{999}{100 - 7.5}(\times 100)$ or

W1 for figs 925 seen

6

(11) (a) 229 to 231°

[4]

W3 for 49.9 to 50.1° or
W2 for 39.9 to 40.1° or
M3 for $180 + (\tan^{-1} \frac{3280}{2750})$ or

M2 for $\tan = \frac{3280}{2750}$ or

M1 for $\tan = \frac{2750}{3280}$

(b) 4200 or 4190

[4]

W3 for 4185 to 4215 or

M2 for $\frac{3280}{\cos 38.5}$ or

M1 for $\cos 38.5 = \frac{3280}{LC}$

After W0 allow W1 for any
answer to 2 or 3 significant
figures after trigonometry seen.

Note The use of grads and rads gives the following answers.

Grads. (a) $A = 55.58$, $B = 44.42$ (b) 3987.1.. leading to 4000 or 3990

Rads (a) $A = 0.8731$, $B = 0.6977$ (b) 4712.1 leading to 4700 or 4710

8

(12) $32 = \frac{29 + 33 + 34}{3}$

[3] W2 for $29 + 33 + 34 [=96]$

seen or