FORM 2 TUNE UP TERM 2 2013

Attempt all questions MARKING SCHEME (2)

① Use tables of Square root and reciprocals, evaluate to 3 decimal places (4 mks)

$$\frac{3}{\sqrt{0.0416}} + \frac{12}{49.27}$$

$3 \times \frac{1}{\sqrt{0.0416}} + 12 \times \frac{1}{49.27}$

$3 \times \frac{1}{0.204} + 12 \times \frac{1}{49.27}$

$3 \times 4.902 + 12 \times 0.0203$

$14.706 + 0.2436$

14.9496

$= 14.950$

② Solve $4x + 12y = 11$ ... (4mks)

$12x - 4y = 3$ ... 3

$4x + 12y = 11$

$36x - 12y = 9$

$40x = 20$

$x = \frac{20}{40}$

$x = \frac{1}{2}$

$2 + 12y = 11$

$12y = +9$

$y = \frac{9}{12}$

$y = \frac{3}{4}$

$x = \frac{1}{2}$

③ The angle of elevation of the tower from a point x on the horizontal is 28.5°. From another point y 8 metres nearer to the base of the tree, the angle of elevation of the top of the tower is 37.2° By Scale drawing find the height of the tree. (4mks)

$H = 15.2 \pm 0.5$