CLASS: 10	INDIAN SCHOOL MUSCAT SECOND PERIODIC TEST	SUBJECT: Mathematics
	SET - B	
QP.NO.	VALUE POINTS	SPLIT UP MARKS
1.	Simplifying the equation as $2x^2 - 13x + 9 = 0$ Yes, as it is of the form $ax^2 + bx + c = 0$	1 1
2.	Substituting $\frac{5}{2}$ in the equation and finding m = $-\frac{15}{2}$ Finding $\beta = \frac{3}{2}$	1 1
3.	Solving steps Values of $x\ as -\sqrt{2}\ and -\frac{5\sqrt{2}}{2}$	1 1
4.	Equating D = 0 Simplifying and Obtaining $k = \frac{5}{4}$	1 1
5.	Assumptions Framing the relation $x^2 + (x+30)^2 = (x+60)^2$ Simplifying the equation to $x^2 - 60x - 2700 = 0$ Solving and getting $x = 90, -30$ Rejecting -30 Sides are 90 m and 120 m	½ 1 ½ 1 ½ ½
6.	$5x^2 - 6x - 2 = 0 \Rightarrow x^2 - \frac{6}{5}x - \frac{2}{5} = 0$ $\Rightarrow x^2 - \frac{6}{5}x + \left(\frac{3}{5}\right)^2 = \frac{2}{5} + \left(\frac{3}{5}\right)^2$ $\Rightarrow \left(x - \frac{3}{5}\right)^2 = \frac{19}{25}$ $\Rightarrow x - \frac{3}{5} = \pm\frac{\sqrt{19}}{5}$ $\therefore x = \frac{3 \pm \sqrt{19}}{5}$	½ 1 1 ½ ½ +½
7.	Simplifying the equation to $x^2 - 16 = 0$ $D = 48 > 0 \Rightarrow 2\ distinct real\ roots$ Solving for $x = \pm 4$	2 1 1

End of Marking Scheme