TUTORIAL-5

CUBIC SPLINE AND NEWTON'S FORWARD INTERPOLATION

1. Fit the cubic spline for the data. Hence evaluate $y(1.5)$ given that $y_0'' = y_0''' = 0$

$x:$	1	2	3
$y:$	-6	-1	16

2. From the following table find θ at $x = 43$.

$x:$	40	50	60	70	80	90
$\theta:$	184	204	226	250	276	304

3. From the following table, find the value of $\tan 45°15'$.

$x°:$	45	46	47	48	49	50
$\tan x°:$	1.00000	1.03553	1.07237	1.11061	1.15037	1.19175