



CLASS 12

MATHEMATICS – MT3 - MS

1	5/2
2	$1/6, 1/3, 1/2$
3	$2\mathbf{i} + 3\mathbf{j} + \mathbf{k}/\sqrt{14}$
4	$e^{\tan^{-1}x} + C$
5	$\log x^2 + 3x - 18 - 6 \times 1/9 \log \left \frac{2x-6}{2x+12} \right + C$
6	$\frac{x}{2} - \frac{1}{2} \log \cos x + \sin x + C$
7	$\theta = \cos^{-1} \frac{19}{21}$ (Text book chapter 11 example 9)
8	$1/2 \vec{AB} \times \vec{AC} $
9	1) 6N 2) A 3) $\sqrt{2}$ N
10	a) St.line b) (6, -8, 2) c) $\sqrt{650}$ km d) 10