## The Line (Q 2, Paper 2)

## Lesson No. 2: Distance Formula

## 2005

2 (a) Find the distance between the two points $(3,4)$ and $(15,9)$.

## 2003

2 (a) Find the distance between the two points (3,2) and ( 8,14 ).

## 2000

2 (b) $a(-2,-1), b(1,0)$ and $c(-5,2)$ are three points.
(i) Show that $|a b|=\sqrt{10}$.
(ii) Find $|b c|$.
(iii) Hence, find the ratio $|a b|:|b c|$.

Give your answer in the form $m$ : $n$ where $m$ and $n$ are whole numbers.

## 1999

2 (c) $a(0,5), b(x, 10)$ and $c(2 x, x)$ are three points.
Find $|a b|$ in terms of $x$.
If $|a b|=|b c|$, calculate the two possible values of $x$.

## 1997

2 (a) Find the distance between the two points $(-5,1)$ and (7, -4 ).

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Answers
2005 2 (a) 13
2003 2 (a) 13
2000 2 (b) (i) \sqrt{}{40}=2\sqrt{}{10}
(ii) 1:2
19992 (c) }|ab|=\sqrt{}{\mp@subsup{x}{}{2}+25;};x=5,1
1997 2 (a) 13
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