1: Work out the following:

a) A line segment is drawn between (4, 8) and (8, 5). Find its gradient.

b) A line segment is drawn between (2, 8) and (5, 4). Find its gradient.

c) A line segment is drawn between (4, 7) and (9, 7). Find its gradient.

2: Work out the following:

a) A line segment is drawn between (9, 0) and (10, 4). Find its mid-point.

b) A line segment is drawn between (2, 8) and (4, 9). Find its mid-point.

c) A line segment is drawn between (7, 4) and (10, 7). Find its mid-point.

3: Work out the following:

a) A line segment is drawn between (5, 9) and (9, 4). Find its length.

b) A line segment is drawn between (0, 5) and (5, 10). Find its length.

c) A line segment is drawn between (8, 9) and (9, 7). Find its length.

4: Work out the following:

a) A line segment is drawn between (6, 4) and (8, 3). Find its gradient, mid-point and length.

b) A line segment is drawn between (5, 4) and (10, 6). Find its gradient, mid-point and length.

c) A line segment is drawn between (6, 0) and (7, 1). Find its gradient, mid-point and length.

**Answers: Line Segments**

[www.mathsprint.co.uk](http://www.mathsprint.co.uk/)

1: a) Gradient = 3

4

b) Gradient = 4

3

c) Gradient = 0

2: a) Mid-point = (9.5, 2)

b) Mid-point = (3, 8.5)

c) Mid-point = (8.5, 5.5)

3: a) Length = 41

b) Length = 50

c) Length = 5

4: a) Gradient = 1

2

Mid-point = (7, 3.5) Length = 5

b) Gradient = 2

5

Mid-point = (7.5, 5) Length = 29

c) Gradient = 1

Mid-point = (6.5, 0.5) Length = 2