1.   The conversion graph can be used to change between pounds (£) and Euros (€).
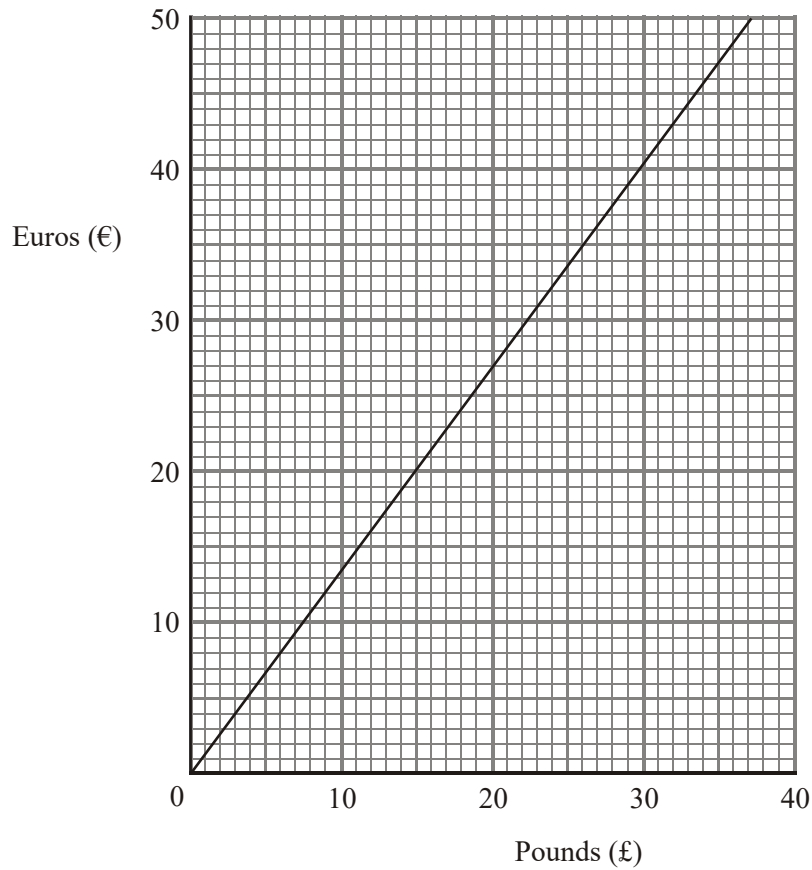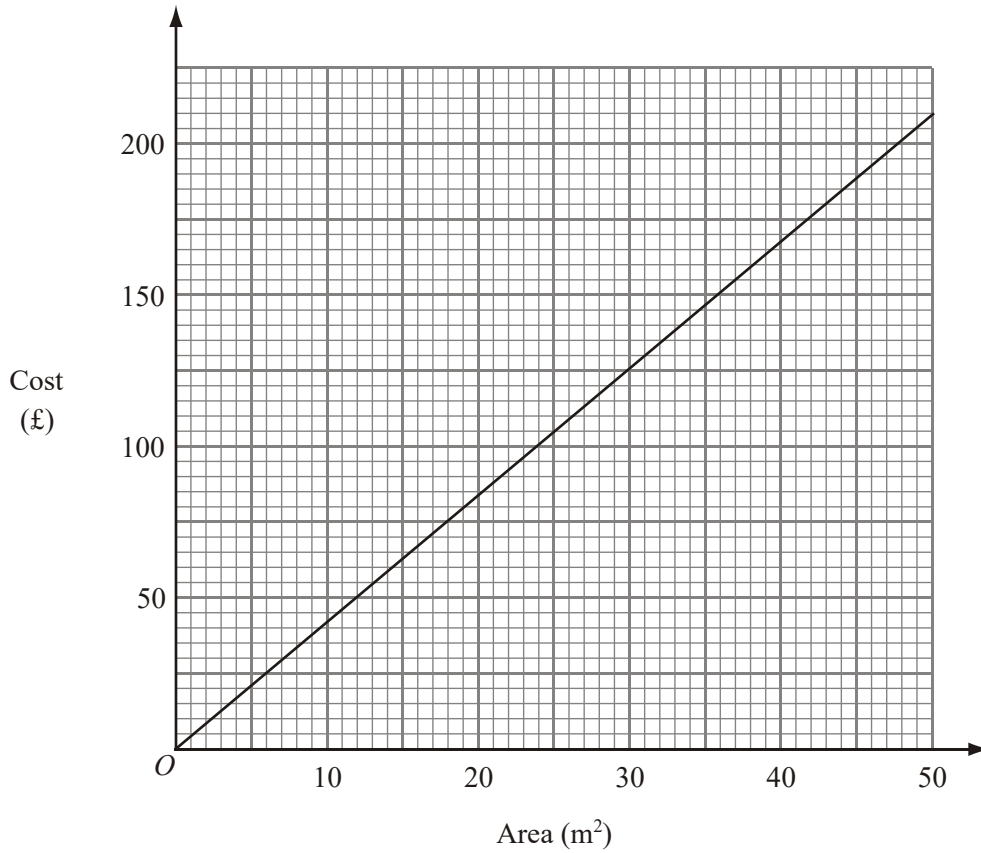

(a)   Use the graph to change 30 pounds to Euros.

€ ....
(1)

(b)   Use the graph to change 16 Euros to pounds.

£ ....
(1)
(Total 2 marks)

2.   John cleans carpets of different areas.
He uses this graph to work out the cost of cleaning a carpet.

A carpet has an area of 30 m^2.

(a)   Use the graph to find the cost of cleaning this carpet.

£ ....

(1)

It costs £150 to clean another carpet.

(b)   Use the graph to find the area of this carpet.

.... m^2

(1)
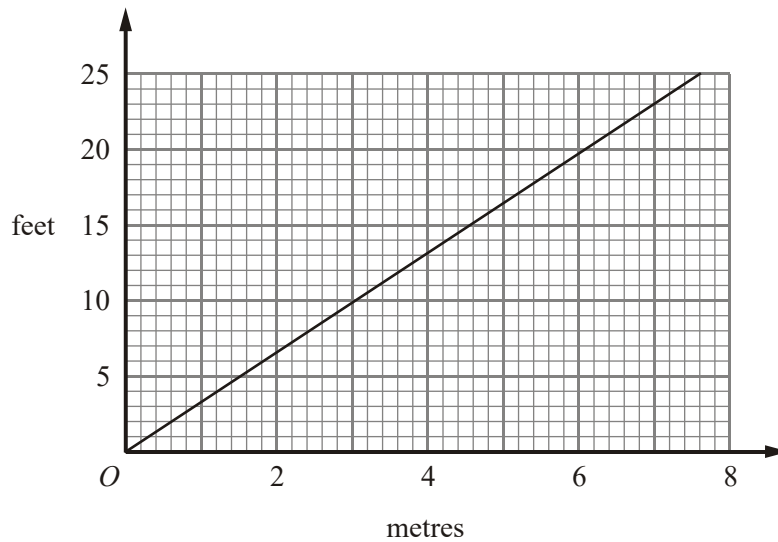
A rectangular carpet has a length of 8.6 m.
It has a width of 5 m.

(c)   Work out the cost of cleaning this carpet.

£ ....

(3)
(Total 5 marks)

3.

This conversion graph can be used to change between metres and feet.

(a)   Use the conversion graph to change 6 metres to feet.

.... feet

(1)

(b)   Use the conversion graph to change 8 feet to metres.

.... metres

(1)

Robert jumps 4 metres.
James jumps 12 feet.

(c)   (i)   Who jumps furthest, Robert or James?

....

        (ii)   How did you get your answer?

        ....

        ....
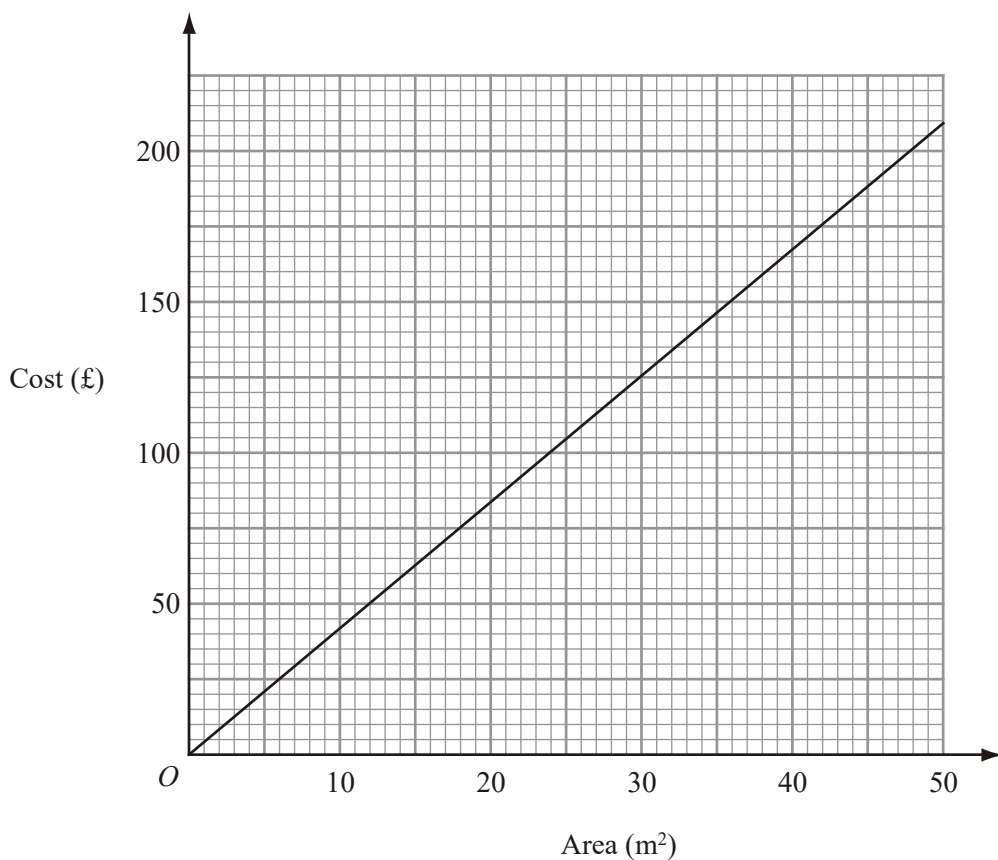
(2)
(Total 4 marks)

4. John cleans carpets of different areas.
He uses this graph to work out the cost of cleaning a carpet.

A carpet has an area of 30 m^2.

(a)   Use the graph to find the cost of cleaning this carpet.

£ ....
(1)

It costs £150 to clean another carpet.

(b)   Use the graph to find the area of this carpet.

.... m^2
(1)
(Total 2 marks)

1. (a) 40   1

       B1 for 40 – 41 inclusive

    (b) 12   1

       B1 for 11.5 – 12.5 inclusive

           [2]

2. (a) £123-£127   1

       B1 £123-£127 inclusive

    (b) 35-36   1

       B1 35-36 inclusive

    (c) $8.6 \times 5 = 43 \rightarrow$ "£180"
       £175-£185   3

       M1 8.6×5
       A1 43
       A1 answers in the range £175-£185
       SC: B2 for 43

           [5]

3. (a) 20   1

       B1 for 19 to 21

    (b) 2.4   1

       B1 for 2.3 to 2.5

    (c) (i/ii)   Robert   2

       B1 for Robert with a correct conversion (may be evidenced on the graph)
       (B1 for 'Robert' with a valid explanation or James with a correct conversion)
       (may be evidenced on the graph)
       Note: 4m = 13 feet, 12 ft = 3.6m

           [4]

4. (a) 123–127   1

       B1 for 123–127 inclusive

    (b) 35–36   1

       B1 for 35–36 inclusive

           [2]

1. The first part of this question was answered correctly by the vast majority of candidates. However, part (b) was answered less well with about 65% of candidates giving an answer within acceptable limits. Eleven pounds appeared frequently on the answer line.

2. Parts (a) and (b) of this question were well answered. In part (c) the best candidates set out a product and answer with correct units also shown. There was evidence that some candidates arrived at the correct area but misread the graph, usually giving £160 as the answer. Some worked out the perimeter rather than the area, or gave the area (43) as the answer. It was encouraging to find that most candidates were willing to have a go at this multi-stage problem.

3. All candidates made good attempts at this question. Part (a) was very well done but in part (b) many candidates could not read the horizontal scale correctly with '2.2' being an extremely popular incorrect response. Several candidates wrote their answer without a decimal point, possibly by reading from 8m and then estimating the feet.

In Part (c) most recognised that Robert jumped further but where there was no valid statement, no marks were scored. Many scored both available marks in (c) either by providing one correct conversion or by demonstrating they could do the conversion by appropriate markings on the graph. Some candidates misread the scale again, often losing one of the marks in (c). A few thought that James jumped the furthest and occasionally 'they both jumped the same distance' was seen.

4. This question was well understood and the success rates were very high 84% for part (a) and 90% for part (b). The few candidates that did not gain marks made the mistake of rounding their answer to the nearest 10 or 100 rather than using the reading from the graph.