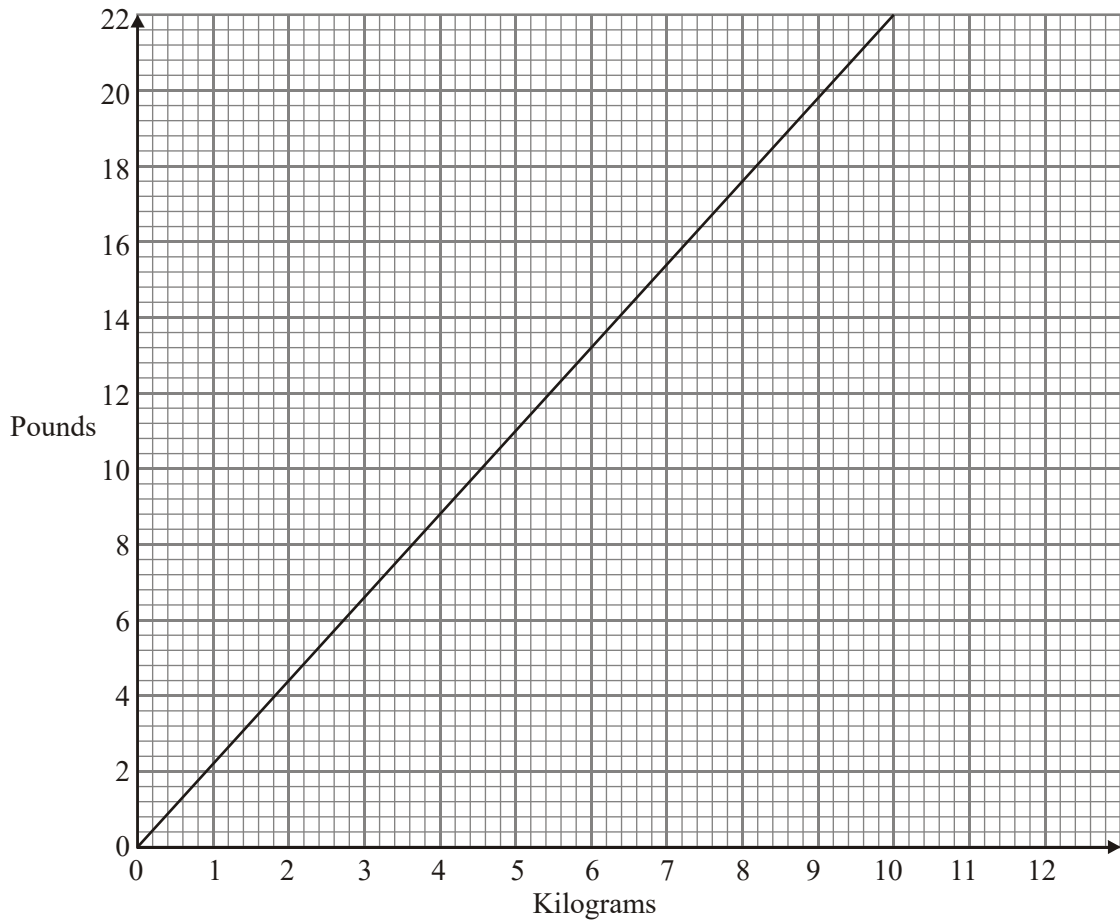


1.



The conversion graph above can be used for changing between kilograms and pounds.

(a) Use the graph to change 22 pounds to kilograms.

..... kg

(1)

(b) Use the graph to change 2.5 kilograms to pounds.

..... pounds

(1)

Firoza weighs 110 pounds.

(c) Change 110 pounds to kilograms.

..... kg

(3)

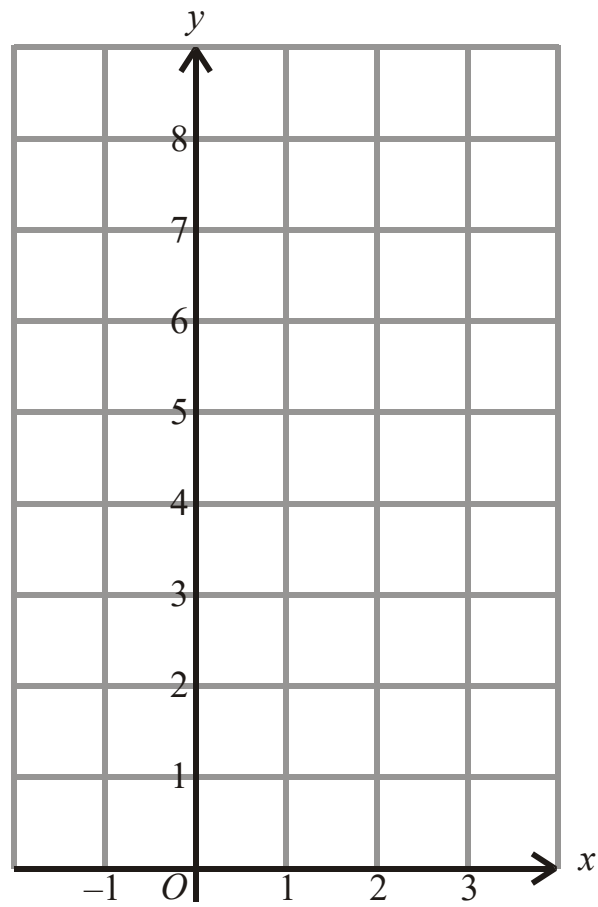
(Total 5 marks)

2. (a) Complete the table of values for $x + y = 5$

x	-1	0	1	2	3
y	6				2

(2)

- (b) On the grid, draw the graph of $x + y = 5$



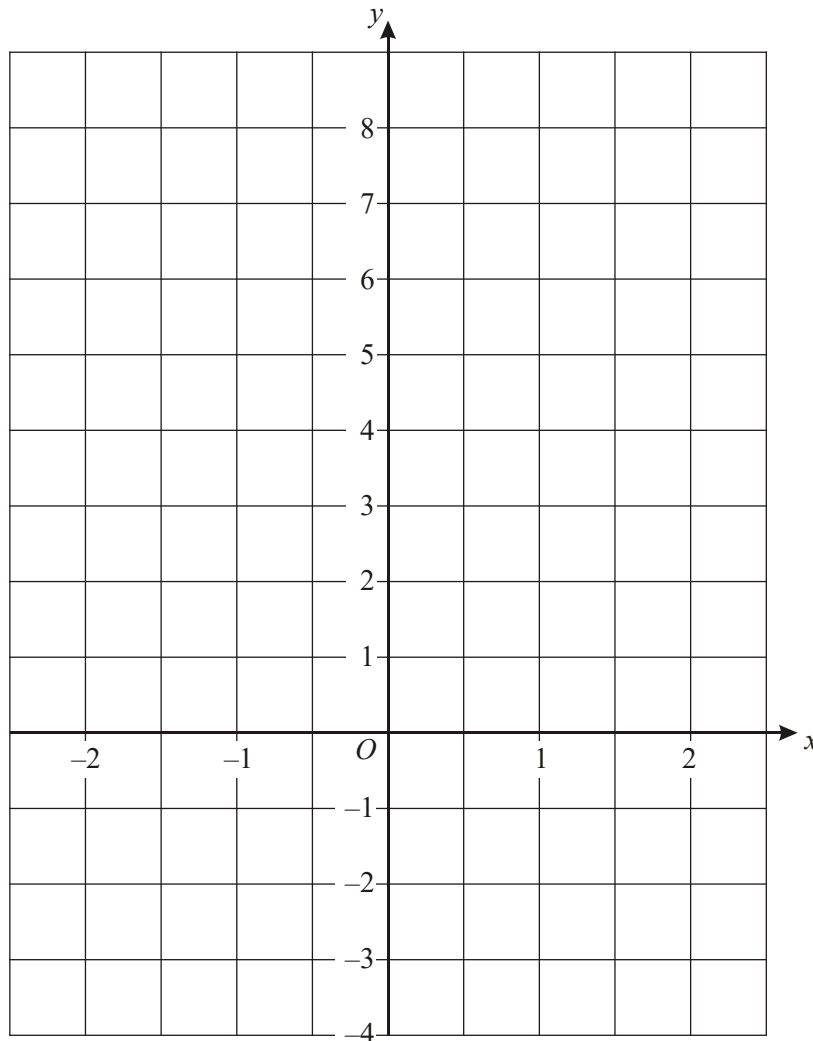
(2)
(Total 4 marks)

3. (a) Complete the table of values for $y = 3x + 2$

x	-2	-1	0	1	2
y		-1		5	

(2)

- (b) On the grid, draw the graph of $y = 3x + 2$



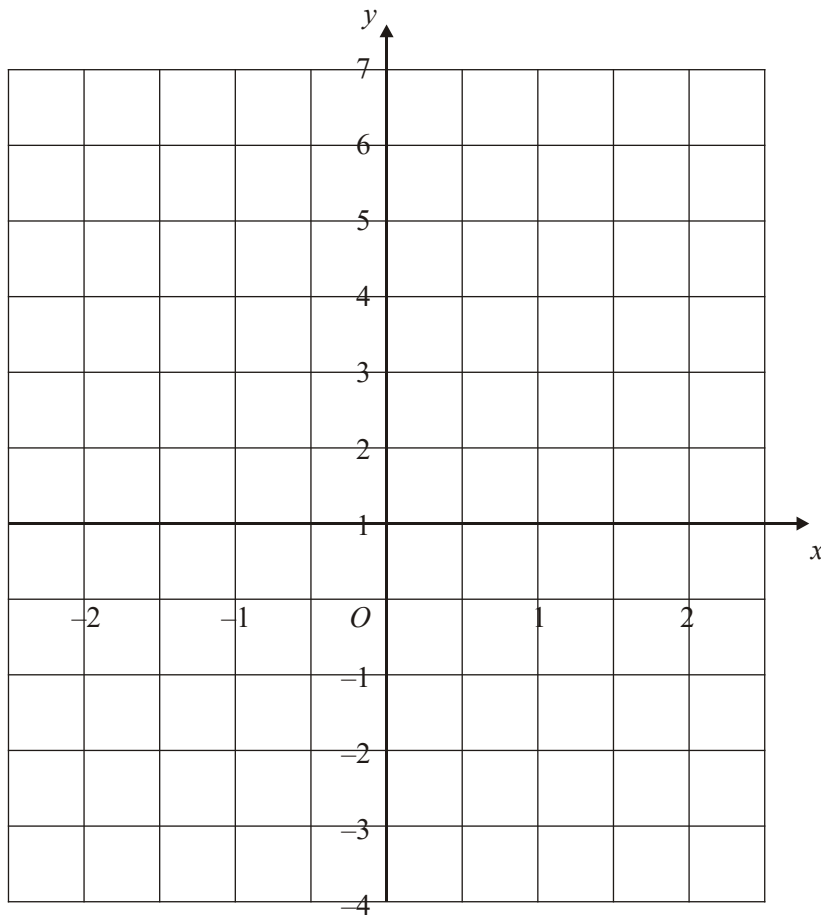
(2)
(Total 4 marks)

4. (a) Complete the table of values for $y = 2x + 1$

x	-2	-1	0	1	2
y		-1		3	

(2)

(b) On the grid, draw the graph of $y = 2x + 1$



(2)
(Total 4 marks)

1. (a) 10

BI cao

1

(b) 5.5

BI ± 0.3 pounds

1

- (c) 50 3
 $\frac{110}{22}$
M1 for use of graph at 11 or $\frac{110}{22}$
A1 for 5
A1 cao
SC B2 for 49.5 – 50.6 [5]
2. (a) 5, 4, 3 2
B2 (B1 for one of 5, 4, 3 correct)
- (b) correct line 2
M1 for plotting at least 2 correct points with no incorrect plots
A1 cao
SC: if table incorrect, B1 for plotting at least 2 points from his table with no incorrect plots [4]
3. (a) $-4 - 1 + 2 + 5 + 8$ 2
B2 for correct table (B1 for 2 correct)
- (b) graph 2
B2 for a correct line
(B1 for all "points" plotted correctly) [4]
4. (a) $-3, (-1), 1, (3), 5$ 2
B2 for all values correct
(B1 for 1 or 2 values correct)
- (b) 2
B2 for correct straight line from $(-2, -3)$ to $(2, 5)$
(B1ft for at least two points correctly plotted) [4]

1. In part (a) almost all candidates gave the correct answer.
In part (b) less than half the candidates wrote down an answer within the acceptable tolerance of 5.5 ± 0.3 pounds. Many either misread the graph or, more probably, did not use the graph but applied the 'rough' conversion factor of 1°kg to 2 pounds to obtain the answer '5'.
In part (c) more candidates gave the unacceptable answer of 55 kg rather than the 50 kg (or thereabouts) gained by accurate use of the graph or by using the conversion factor 1 kg \approx 2.2 pounds. Centres are reminded that this fact is stated in the specification as one which candidates are expected to know.

2. Most candidates scored some marks on this question. Many were able to complete the table and plot the points but a surprising amount of candidates then failed to join them.

3. A straightforward question on linear graphs proved too much for most candidates, which was very disappointing. Over $\frac{3}{4}$ of the candidates failed to score any marks on either part of the question indicating a real lack of understanding of this topic. About $\frac{1}{4}$ of the candidates were able to pick up a mark in part (a) by providing 2 of the 3 required entries in the table.
Candidate's inability to plot points from a table was a definite weakness as they could gain a mark even by plotting points from an incorrect table. It was therefore disappointing and of some concern, that only 15% of those who provided an incorrect table were able to score a mark in part (b). Candidates who were not able to complete the table tended to give up in part (b). If they had drawn the given points in the table and joined them, they would have drawn the correct line!

4. This question was well understood with about 50% of candidates completing the table of values correctly with 35% going on to obtain the correct straight line.