CHAPTER 0

Revision

Revision of CfE Level 2 Work

unless specified.

Revisit, Revise and Recall the contents of CfE Level 2

Exercise 1

1. **Round** to the **nearest 1000** :- a 7395 b 49501.

2. **Copy** and **complete** :- The answer to **7194 + 1985** is about **7200 +** ..... which equals ..... .

3. Write the number that comes :- a 200 **after** 7900 b 500 **before** 13 400.

4. Write the number 870 060 in **words**.

5. Find the following :-

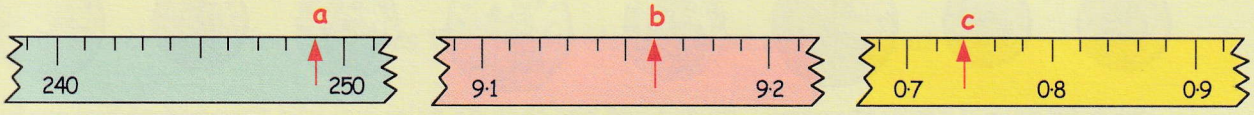
   a $\begin{array}{r} 2980 \\ +\ 560 \\ \hline \end{array}$ b 23 709 + 4093 c $\begin{array}{r} 6000 \\ -\ 1589 \\ \hline \end{array}$ d 20 300 - 7 946.

6. Find the following :-

   a $\begin{array}{r} 4163 \\ \times\ 8 \\ \hline \end{array}$ b 30 060 x 7 c $5\overline{)9345}$ d 82 548 ÷ 6.

7. Eight cartons of milk contain 4544 millilitres.
   How much does each carton contain ?

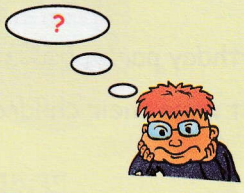
8. To what numbers do these arrows point ?



9. Write down the answers to the following :-

   a 1820 x 100 b 960 000 ÷ 1000 c 231 x 3000 d 8 320 000 ÷ 4000.

10. George is thinking of a number.
    When he subtracts 200 and then divides by 10 the answer is 80.
    What is the number George is thinking of ?



11. **Round** :- a 26·735 to the nearest whole number
    b 13·147 to 1 decimal place c 5·0983 to 2 decimal places.

12. Do the following :-

    a 37·9 + 4·64 b 103·72 - 49·8 c 9·03 x 8 d 53·46 ÷ 3.

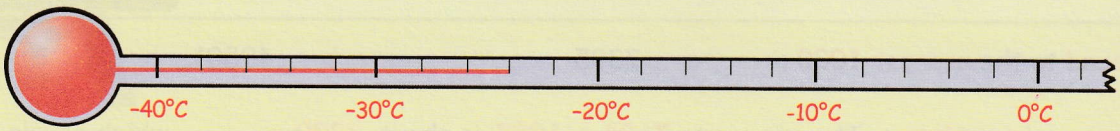
13. Find :-

a 19·82 x 10 **b** 34·7 ÷ 100 **c** 2·405 x 100 **d** 4050 ÷ 1000.

14. Find :-

a 10 - 4 x 2 **b** (10 - 4) x 2 **c** 9 + 6 ÷ 3 - 2 **d** (9 + 6) ÷ 3 - 2.

15. What is the temperature on this thermometer ?



16. Find :-

a 6 - 11 **b** -4 + 9 **c** 6 + (-10) **d** (-9) - 1.

17. Write down the next **two** numbers in these patterns :-

a 27, 31, 35, 39, ... **b** 80, 73, 66, 59, ... **c** 23, 18, 13, 8, ... **d** 1, 2, 4, 8, ...

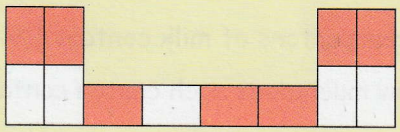
18. Write down the first five **multiples** of 8.

19. Write down all the **factors** of 20.

20. Write down :-

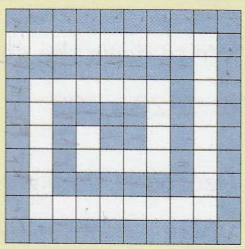
a the **highest common factor** of 30 and 42 **b** the **lowest common multiple** of 6 and 10.

21. What **fraction** of this shape is coloured **pink** ?



22. What **fraction** of these coins are copper ?

23. What **percentage** of this square has been coloured blue ?



24. At a birthday party, 55% were women and 35% were men.
The rest were their children. What **percentage** were children ?

25. Write down any **fraction** equivalent to :- **a** $\frac{3}{5}$ **b** $\frac{5}{7}$.

26. Simplify as far as possible :- **a** $\frac{14}{21}$ **b** $\frac{18}{45}$.

27. What is :- **a** $\frac{1}{3}$ of 45 m **b** $\frac{4}{5}$ of £2·50 **c** $\frac{5}{8}$ of £2·40 ?

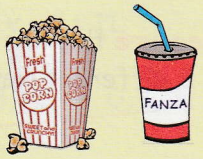
28. Re-write these numbers in order, starting with the **smallest** :- $\frac{3}{4}$, 80%, 0·7.

29. Express 24% as a **fraction**, simplifying it as far as possible.

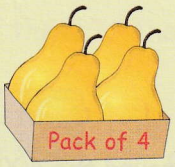
30. Find :- **a** 10% of £12 **b** 25% of £3·60 **c** 5% of £80.

31. 24 out of the 40 cars in a car park are French made. What **percentage** is this ?

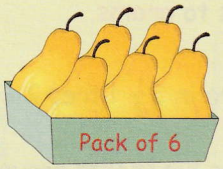
32. Mrs Holmes took her 2 children to the cinema. She had £35 with her.
Her ticket was £11·50 and each child ticket was £6·25.
She also spent £8·25 on popcorn and drinks.
Will she have enough for the bus fares home costing £3·20 ? (*Explain your answer*).



33. Which of these packs of pears gives the better deal ? (*Explain your answer*)



£1·24



£1·98

34. I went to America and changed £300 into dollars when the rate was :- **£1 = $1·60**
How many dollars did I receive ?

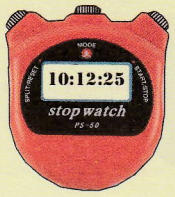
35. A newsagent bought in 8 copies of a new magazine for £17·50.
She sold them all to her customers priced at £2·75 each.
How much **profit** did she make altogether ?

36. A TV film ended at 22:10. Write this in 12 hour form, using am or pm.

37. A CD track lasted for 3 minutes 15 seconds. How many seconds was that ?

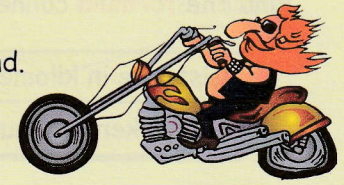
38. I walked to the post box in 6 mins 35 secs and the return journey took me 5 mins 55 secs.
How long did it take me **altogether** ?

39. Bonny swam the 800 metre race in 10 mins 9·55 seconds.
Jenny swam it in the time shown on the stopwatch.
Who was faster and by how much ?



40. My plane left Inverness at 13:50 and touched down in London at 15:35.
How long had my flight lasted ?

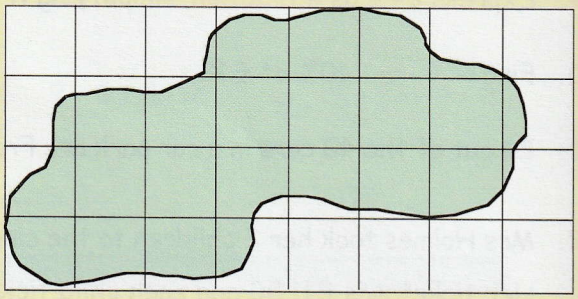
41. I drove the 300 miles from Glasgow to Wick in the North of Scotland.
It took me exactly 5 hours on my motorbike.
Calculate my **average speed**.



42. 

Estimate the **length** of a **real** umbrella in centimetres.

43. Estimate the **area** of this shape, in cm^2.



44. **Measure** this line and express your answer in 3 different ways.

45. Change 306 centimetres to **metres** and **centimetres**.

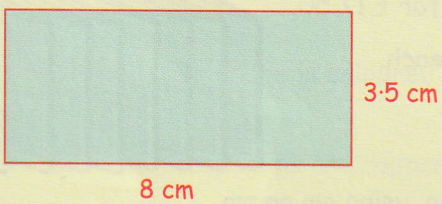
46. Change 5 kilograms 70 grams to **grams**.

47. How many **millilitres** are there in $3\frac{1}{2}$ litres ?

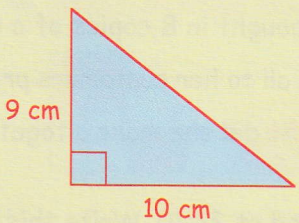
48. Ian jogs the $2\frac{1}{4}$ kilometres to his sports ground, then runs **twice** round the 400 metre track.
How far has Ian run **altogether** ?

49. Calculate the **area** of each of these shapes :-

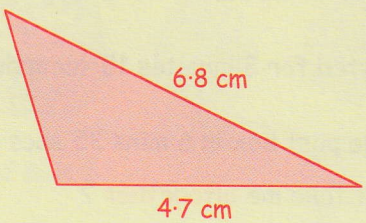
a



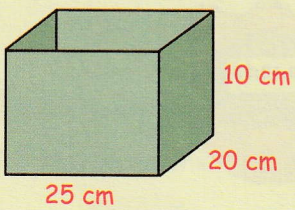
b



50. The **perimeter** of this triangle is 15·1 cm.
Calculate the length of the 3rd side.



51.



a Calculate the **volume** of this container in cm^3.

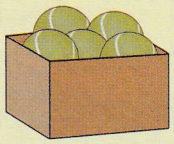
b How many **litres** will it hold when full ?

52. This table shows the number of kilometres (k) I walked and the time taken (T), in minutes.
Find the **formula** connecting T and k.

Distance in kilometres (k)	1	2	3	4	5
Time taken in minutes (T)	9	18	27	36	45

T = ...

53. This table shows the connection between the weight (W) grams of a box containing various numbers of tennis balls (T). Find the **formula** connecting W and T.



Number of tennis balls (T)	1	2	3	4	5
Weight in grams (W)	130	180	230	280	330

W = ... + ...

54. **Solve** these equations for x :-

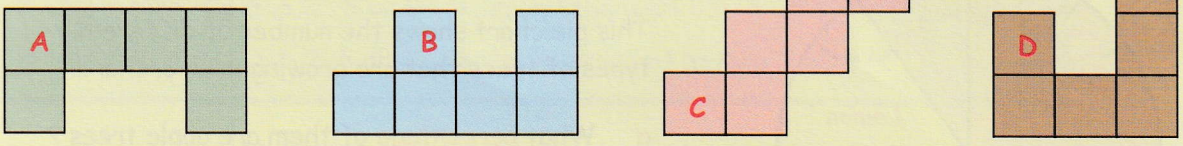
a $x + 7 = 15$ b $3x = 21$ c $2x - 4 = 11$.

55. Write down all the solutions for $p \leq 2$ from the set of possibilities :- {-3, -2, -1, 0, 1, 2, 3}.

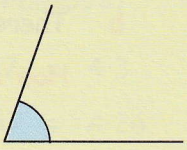
56. Write down **2** main **differencies** between a rectangle and a parallelogram.

57. How many **edges** has a square based pyramid ?

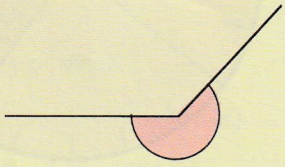
58. Which one of these **IS** the net of a cube ?



59. What **type** of angles are these ? a

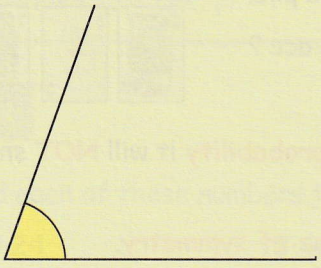


b

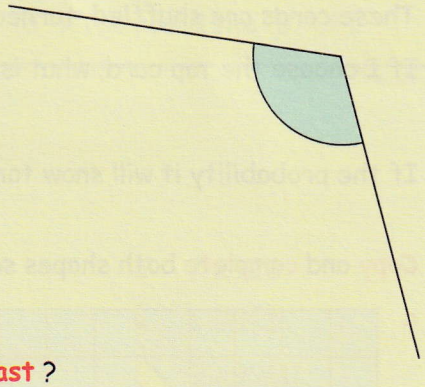


60. **Measure** these angles and write down their sizes :-

a

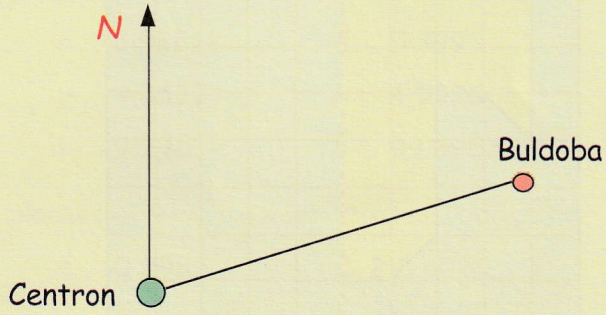


b

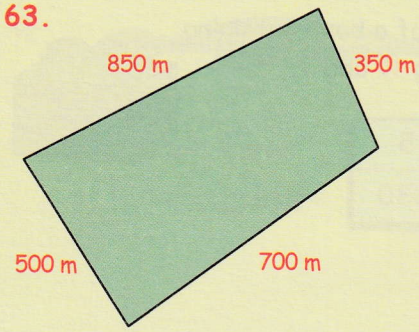


61. On a compass, what direction is directly opposite **South East** ?

62. Measure and write down the **bearing** of Buldoba **from** Centron.



63.



This sketch shows a plot of land where houses are to be built.

A scale drawing of this plot of land has to be made **on this page**.

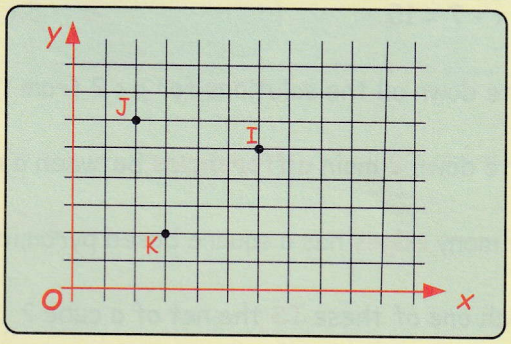
Which would be the **most appropriate** scale to use ?

A 1 cm = 25 m **B** 1 cm = 50 m

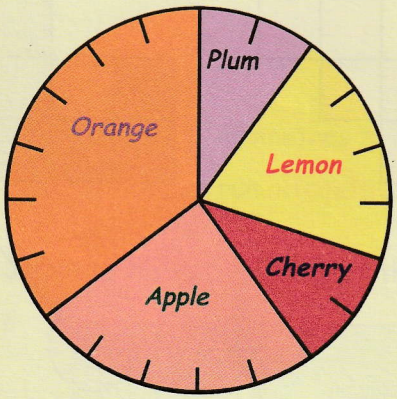
C 1 cm = 10 m **D** 1 cm = 1 m ?

64. **a** Write down the **coordinates** of point **I**.

b Write down the **coordinates** of a 4th point, (call it **L**), so that **IJKL** is a rhombus.



65.



This pie chart shows the number of different types of trees that are growing in an orchard.

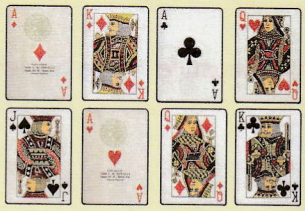
a What **percentage** of them are apple trees ?

b There are 300 trees in the orchard.

How many apple trees are there ?

66. These cards are shuffled, turned upside down and placed in a pile.

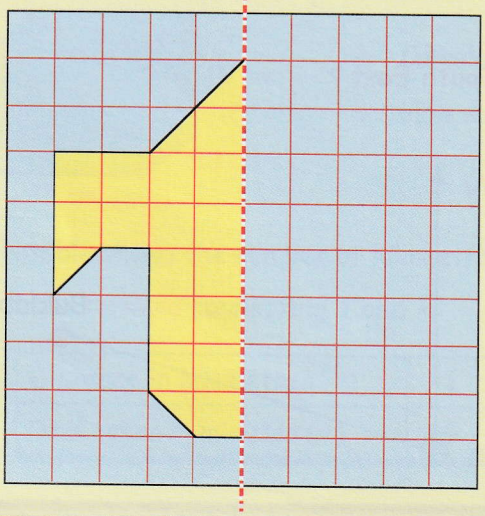
If I choose the top card, what is the **probability** it will be an ace ?



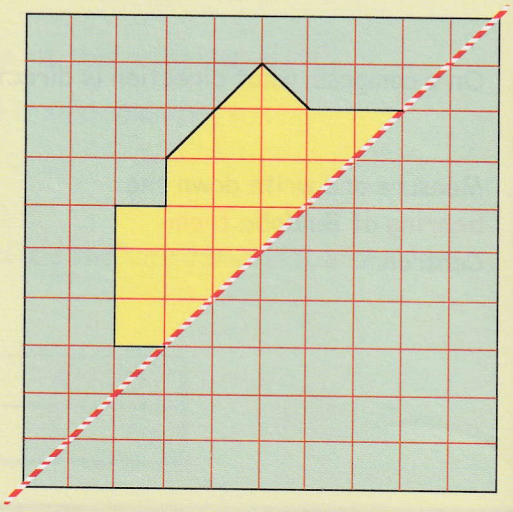
67. If the probability it will snow tomorrow is 0·13, what is the **probability** it will **NOT** snow ?

68. **Copy** and **complete** both shapes so that the dotted line is a **line of symmetry**.

a



b



Answers to end of second level revision sheets.

Please check your work and review and questions you didn't get correct. Either redo the question if you can see where you made a mistake or make a note of the question type as a next step for your learning.

Answers to Chapter 0 (page 1)

1. a 7000 b 50000
2. 7200 + 2000 = 9200
3. a 8100 b 12900
4. eight hundred and seventy thousand and sixty
5. a 3540 b 27802 c 4411 d 12354
6. a 33304 b 210420 c 1869 d 13758
7. 568 ml
8. a 249 b 9·16 c 0·74
9. a 182000 b 960 c 693000 d 2080
10. 1000
11. a 27 b 13·1 c 5·10
12. a 42·54 b 53·92 c 72·24 d 17·82
13. a 198·2 b 0·347 c 240·5 d 4·05
14. a 2 b 12 c 9 d 3
15. -24°C
16. a -5 b 5 c -4 d -10
17. a 43, 47 b 52, 45 c 3, -2 d 16, 32
18. (0), 8, 16, 24, 32, 40
19. 1, 2, 4, 5, 10, 20
20. a 6 b 30
21. $^{7}/_{12}$
22. $^{3}/_{8}$
23. 60%
24. 10%
25. a $^{6}/_{10}$ b $^{10}/_{14}$

24. 10%
25. a $^{6}/_{10}$ b $^{10}/_{14}$
26. a $^{2}/_{3}$ b $^{2}/_{5}$
27. a 15 m b £2·00 c £1·50
28. 0·7, $^{3}/_{4}$, 80%
29. $^{24}/_{100} = {}^{6}/_{25}$
30. a £1·20 b 90p c £4
31. 60%
32. No - Short by 45p.
33. pack of 4 costs 31p each (√ - better) pack of 6 costs 33p each
34. $480
35. £4·50 altogether
36. 10.10 pm
37. 195 seconds
38. 12 mins 30 secs
39. Bonny - by 2·70 secs
40. 1 hr 45 mins
41. 60 miles per hour
42. 50 to 80 cm
43. 19 cm^2
44. 12·8 cm - 12 cm 8 mm - 128 mm
45. 3 metres 6 cm
46. 5070 grams
47. 3500 ml
48. 3050 metres
49. a 28cm^2 b 45 cm^2
50. 3·6 cm

51. a 5000 cm^3 b 5 litres
52. $T = 9k$
53. $W = 50T + 80$
54. a $x = 8$ b $x = 7$ c $x = 7·5$
55. {-3, -2, -1, 0, 1, 2}
56. various "-
    - all 4 angles are right angles
    - 2 lines of symmetry
    - diagonals the same length
    - fits its outline 4 ways etc.
57. 8
58. C

58. C
59. a acute b reflex
60. a (70 ±2)° b (113 ± 2)°
61. North West
62. 074° (±2°)
63. B 1 cm = 50 m
64. a I(6, 5) b L(7, 1)
65. a 25% b 75
66. $^{3}/_{8}$
67. 0·87
68. a b