

**2 Year IGCSE Course    Week 3 homework**

1 Correct the following to                    a) 1 sig fig    b) 3 sig fig    c) 1 dec place

- i) 4,275.892            ii) 27,364.249            iii) 0.75243            iv) 29.6295            v) 0.004325

2 Find the following percentages WITHOUT a calculator

- a) 10% of 420    b) 10% of 67    c) 1% of 80    d) 1% of 54    e) 5% of 620  
 f) 5% of 56    g) 15% of 20    h) 15% of 84    i) 20% of 200    j) 20% of 31  
 k) 11% of 980    l) 25% of 160    m) 35% of 28    n) 95% of 400    o) 99% of 74

3 Convert the following to fractions

- a) 37%    b) 0.67    c) 22%    d) 0.3    e) 5%    f) 0.04    g) 12.5%    h) 1.2    i) 134%

4 Convert the following to decimals

- a) 20%    b) 1/10    c) 45%    d) 2/5    e) 6%    f) 7/20    g) 17.5%    h) 67%    i) 6/25

5 Convert the following to percentages

- a) 0.46    b) 7/10    c) 0.31    d) 4/5    e) 0.09    f) 13/20    g) 0.8    h) 3/100    i) 3/4

6 Complete the table

Fractions	1/2			3/5				1/8	
Decimals		0.25				0.06			
Percentages			10%		24%		7%		112%

7 Find the percentages WITH a calculator (remember to convert the percentage to a decimal first)

- a) 12% of 49    b) 22% of 6000    c) 61% of 540    d) 8% of 62    e) 5% of 98    f) 7.5% of 63

8 Increase the following amounts by the percentages

- a) £36 by 5%    b) £65 by 15%    c) £48 by 18%    d) £2,500 by 7%    e) 5,250kg by 2.5%

9 Decrease the following amounts by the percentages

- a) £84 by 12%    b) £48 by 32%    c) 560kg by 18%    d) £3,600 by 9%    e) £63 by 67%

10 A shop has a 20% off sale, find the sale prices of the following items

- a) a scarf costing £7                    b) a pair of boots costing £35                    c) a jacket costing £49

11 In another sale a jacket costing £29.99 is reduced by 15% what is the new price?

12 In peeling potatoes 6% of the mass of the potatoes is lost as peel.

How much is left for use from a bag of potatoes originally weighing 25kg

13 In the last week of a sale prices are first reduced by 20% and then by a further 30%

What is the final sale price of a shirt costing £20?

14 In 2012, 360,000 people visited Bali for their holiday

- a) if 1/8 of the visitors were American, how many Americans visited Bali?  
 b) If 11% of the visitors were French, how many French visitors were there?  
 c) 12,000 visitors were from Japan. What fraction of the visitors were Japanese?

15 Jed has a packet of 48 sweets if he eats 12, what percentage does he have left?

16 Marcia is going to do a journey of 125 miles, she stops at a service station that is 50 miles into her journey, what percentage of her trip has she done so far?

Marcia starts her journey with a full tank of 40 litres of petrol. At the end of her journey her petrol tank is 56% full, how much petrol has she used?

17 A baby weighs 7.6 lbs at birth, if he increases in weight by 12% in the first 2 weeks

how much will he weigh after 2 weeks