**Lucan Community College**

**1st Year Mathematics**

**Class Martin**

**Mr Duffy**

**All work must be clearly shown where you see the following symbol 🖎**

**Answer all questions**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

Q1 (a) Write these fractions in their simplest form (your calculator will do this for you)

(i)  (ii)  (iii)  (iv) 

🖎

(b) Simplify each of the following. Try it without using calculator and then check it again with your calculator.

(i)  (ii)  (iii) 

🖎

(c) Simplify the following

(i)  (ii)  (iii) 

🖎

Q2. (a) Simplify each of the following

(i) 

🖎

(ii) 

🖎

(iii) 

🖎

(iv) 

🖎

(b) Simplify each of the following by first working out what’s inside the brackets

(i) 

🖎

(ii) 

🖎

(c) (i) Express 18 minutes as a fraction of an hour.

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(ii) Ciarán spent of his money and had €12 left. How much did he have at first?

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Q3. (a) Simplify (i) 12.84 + 6.02 +4.9 (ii) 1.8 x 0.9

🖎 (i) (ii)

(b) Express these fractions as decimals

1. 0.4

🖎

1. 0.75

🖎

1. 0.125

🖎

(iv) 0.08

🖎

(c) Emer spent 0.4 of her money in one shop 0.3 of it in a second shop. If she had €10.95 left, how much did she have at first?

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Q4. (a) Simplify 

🖎

(b) Express the following as percentages

(i) 

🖎

(ii) 

🖎

(c) Find

1. 20% of 350

🖎

1. 5% of €136

🖎

1. If 11% of a number is 77, find the number.

🖎

Q5. (a) The cost of a meal for 4 people is €80 + VAT at 12. Find the total cost of the meal after the VAT had been added on.

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(b) In 1981 the population of a town was 3840. In 1991 the population was 4128. What was the percentage increase over the ten years?

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(c) A retailer bought 42 cassettes at €9.30 each. He broke 2 of them and sold the rest at a profit of 30%. Find his total profit on the whole deal.

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