Functional Skills Mathematics

ESTATE AGENTS

Today you will be working as an estate agent. You will be working with:

- Fractions
- Decimals
- Percentages

LEARNING OBJECTIVES...

Today we will:

- Add, subtract, multiply and divide using decimals.

- Convert improper fractions into whole numbers.

- Add and subtract using fractions

- Simplify fractions

- Decrease and increase amounts using percentages

- Demonstrate equivalences between percentages, fractions and decimals

DECIMALS REVISION...

Decimals and calculators:

Money

50p is either 0.5 or 0.50

20p is either 0.2 or 0.20

1p is 0.01

5p is 0.05

It's the same as

Length

50cm is 0.5 or 0.50

5cm is 0.05

TASK ONE

You have been asked to find the total amount of money you have made on rent this month.

Here are the figures:

4 Bedroom houses: £7850.00

3 bedroom houses: £3510.00

2 Bedroom houses: £5670.50

1 Bedroom houses: £2010.25

Flats/ Apartments: £8940.50

TASK TWO

One of the landlords offers "bills included" with the properties he rents. How much money will the landlord need to pay for the following :
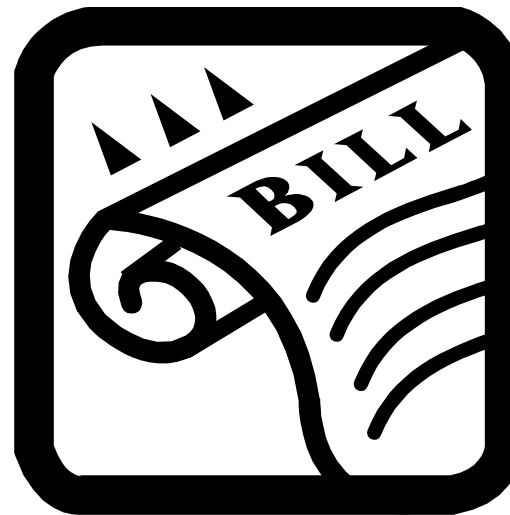
(Per month)

Gas: £56.93

Electric: £78.64
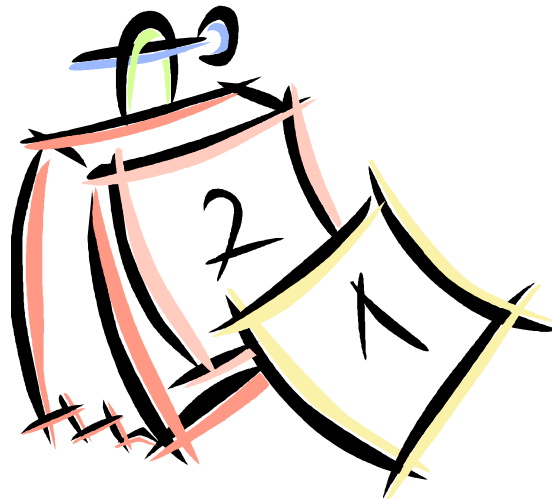
Water: £102.59

Council tax: £120.50

Internet: £19.99

TASK THREE

Using the information you already have. How much will the landlord need to pay in a year for the bills?

(Remember to check your calculations using either rounding or reversing.)

FRACTIONS REVISION

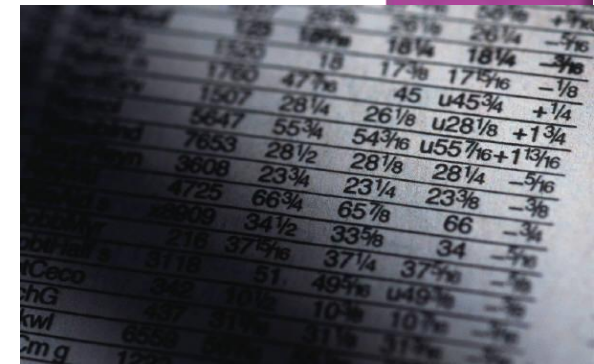**Fractions show parts of a whole e.g. ¾ means you have 3 out of 4 parts.**

Lets say you want to add **1/5 and 2/5** together. The bottom number (the denominator) stays the same, and you add the two top numbers (numerators)

2+1 = 3 therefore, you have 3/5

But what if you wanted to add **1/3 and 2/6** together? You would need to make the denominator the same.

1/3 then becomes 2/6

2/6 + 2/6 = 4/6

IMPROPER FRACTIONS

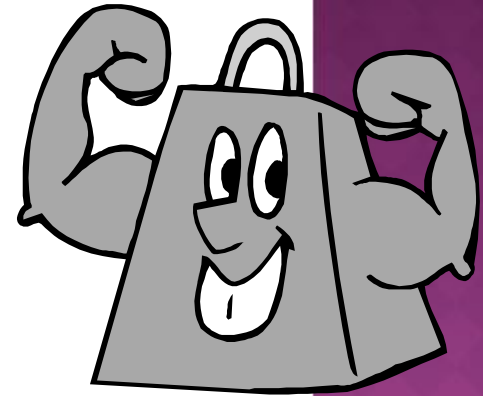**An improper fraction is a fraction where the numerator is bigger than the denominator.**
{TOP HEAVY FRACTIONS}

e.g. 8/6 is an improper fraction

6/6 = 1 whole

Now we have 2/6 left over

8/6 = 1 + 2/6

TASK FOUR

When taking out a mortgage for a house. You end up paying a lot more than the price of the house. This is because of interest.

Convert these improper fractions to show how much people have paid.

House cost	Amount paid	Total amount spent
£100,000	6/4 =	
£240,000	8/6 =	
£525,000	7/5 =	

TASK FIVE

Work out the following:

1. 2/6 + 3/6 =
2. 4/10 + 2/10 =
3. 3/5 + 1/5 =
4. 6/7 + 4/7 =
5. 5/4 + 1/4 =
6. 8/10 + 5/10
7. 4/2 + 5/2 =
8. 16/20 + 5/20 =

TASK SIX

Your manager has asked you to simplify the following document for a presentation he will be doing.

"This year **36/40** of our landlords have reported that we have excellent customer service skills. **136/200** of our properties are rental and the remaining **64/200** are for sale.

We have managed to let **40/64** of our properties in the past 3 months. Well done everyone!"

TASK SEVEN

The landlords are struggling to rent out their properties at the moment because of the recession. They have decided to decrease the rental amounts by 7%. Work out what the new rental prices will be. Round your amounts to the nearest pound. (N.B pcm means per calendar month)

- 3 Bedroom house £550 pcm
- 5 Bedroom house £675 pcm
- 1 Bedroom flat £400 pcm
- 2 Bedroom Bungalow £480 pcm
- 2 Bedroom Maisonette £500 pcm
- 6 Bedroom Farmhouse £950 pcm

TASK EIGHT

Using the table below. Work out how much money each person has got left to pay.

House price	Percentage paid	Amount owed
£450,000	16%	
£520,500	5%	
£305,900	20%	
£690,500	55%	
£120,050	78%	
£98,000	60%	
£65,800	52%	

TASK NINE