MORTGAGES

A mortgage is a loan from a bank or building society to buy a home.

The size of the mortgage depends on the bank or building society's valuation of the property and the earnings of the prospective buyers.

The valuation is often less than the purchase price. The bank or building society will only lend a certain percentage of the valuation. The buyer has to find the rest of the money from other sources (possibly savings); this money is known as the deposit.

For example suppose a terraced house was valued at £86000 by the building society.
The purchasers were only allowed an 80% mortgage.
£86000 × 80 ÷ 100 = £68800
Mortgage for £68800 means a deposit must be found.
Deposit = £89950 - £68800 = £21150.
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For sale
£89 950

How much you borrow also depends on your pretax income.

The usual rule is 3.25 x your annual income.
If two people are applying they decide by taking the greater of these options:-
either   3.25 x higher annual income + 1 x lower annual income
or   2.5 x combined annual income.

To borrow £68800 an individual would need a salary of at least
£68 800 ÷ 3.25 = £21169.23 or about £21200 per annum.

If two people were to borrow £68800 then their combined income would need to be at least £68 800 ÷ 2.5 = £27 520 .

Chart showing how much two people can borrow using the greater of
3.25 x higher income plus 1 x lower income   or   2.5 x combined income:

Second income	Main income					
	£10 000	£15 000	£20 000	£25 000	£30 000	£35 000
£0	£32 500	£48 750	£65 000	£81 250	£97 500	£113 750
£5 000	£37 500	£53 750	£70 000	£86 250	£102 500	£118 750
£10 000	£50 000	£62 500	£75 000	£91 250	£107 500	£123 750
£15 000		£75 000	£87 500	£100 000	£112 500	£128 750
£20 000			£100 000	£112 500	£125 000	£137 500
£25 000				£125 000	£137 500	£150 000
£30 000					£150 000	£162 500
£35 000						£175 000

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The table below shows the monthly repayments required for £1000 mortgage at various interest rates over various periods of time.

Rate	10 years	15 years	20 years	25 years	30 years
5%	£10.80	£8.03	£6.69	£5.92	£5.43
6%	£11.33	£8.59	£7.27	£6.52	£6.06
7%	£11.87	£9.15	£7.87	£7.16	£6.72
8%	£12.42	£9.74	£8.49	£7.81	£7.41
9%	£12.99	£10.34	£9.13	£8.49	£8.12
10%	£13.57	£10.96	£9.79	£9.19	£8.84
11%	£14.16	£11.59	£10.47	£9.90	£9.59
12%	£14.75	£12.24	£11.16	£10.63	£10.35
13%	£15.36	£12.90	£11.87	£11.37	£11.12
14%	£15.98	£13.57	£12.59	£12.13	£11.91
15%	£16.61	£14.26	£13.32	£12.90	£12.70

In our worked example a mortgage of £68800.

If they repay at 5% over 20 years
Monthly repayments $= £68800 \div 1000 \times £6.69 = £460.27$
Total mortgage repayment $= £460.27 \times 12 \times 20 = £110464.80$
Interest $= £110464.80 - £68800 = £41664.80$

If they repay at 5% over 25 years
Monthly repayments $= £68800 \div 1000 \times £5.92 = £407.30$
Total mortgage repayment $= £407.30 \times 12 \times 25 = £122190.00$
Interest $= £122190 - £68800 = £53390$

If they repay at 5% over 30 years
Monthly repayments $= £68800 \div 1000 \times £5.43 = £373.58$
Total mortgage repayment $= £373.58 \times 12 \times 30 = £134488.80$
Interest $= £134488.80 - £68800 = £65688.80$

As the mortgage term increases although the monthly payments are less the total amount of interest paid increases. The amount of interest is over £2000 per year .

Total cost of the house = Deposit + Total mortgage repayment
£21150 + £110464.80 = £131614.80 with 20 year mortgage
£21150 + £122190 = £143340 with 25 year mortgage
£21150 + £134488.80 = £155638.80 with 30 year mortgage

Exercise

Choose one of these cases and work through using the model given.

A   Mr Allen purchases a two bedroomed flat for £84950. The building society value it at £80000 and offer him a 100% mortgage at 6%. What deposit does he need to find?

   a) Calculate the amount he pays per month if he chooses a 20 year mortgage.
       What is his total mortgage repayment?
       What is the total cost of the house?

   b) Calculate the amount he pays per month if he chooses a 25 year mortgage.
       What is his total mortgage repayment?
       What is the total cost of the house?

   c) Calculate the amount he pays per month if he chooses a 30 year mortgage.
       What is his total mortgage repayment?
       What is the total cost of the house?

   What is the minimum salary Mr Allen could earn to be offered a mortgage of £80000?

B   Mr and Mrs Baker purchase a three bedroomed house for £129500.
   The building society value it at £125000 and offer them an 80% mortgage at 5%.
   What deposit do they need to find?

   a) Calculate the amount they pay per month if they choose a 20 year mortgage.
       What is their total mortgage repayment?
       What is the total cost of the house?

   b) Calculate the amount they pay per month if they choose a 25 year mortgage.
       What is their total mortgage repayment?
       What is the total cost of the house?

   c) Calculate the amount they pay per month if they choose a 30 year mortgage.
       What is their total mortgage repayment?
       What is the total cost of the house?

   What is the minimum combined salary Mr and Mrs Baker could earn to be offered a mortgage of £100000?