



Activity description

Students work out VAT without a calculator, then check their answers using a different method. This check could be done on a calculator or computer.

Suitability and time

Level 1/2 (Foundation/Intermediate/Higher); 1-2 hours

Equipment and resources

Calculators (optional), computers (optional)
Slides, Information sheet, Worksheets A, B, C, Spreadsheet

Key mathematical language

Value added tax (VAT), percentage

Notes on the activity

The information sheet gives a variety of methods for working out VAT at 20% and 5%. For less able students you may wish to concentrate on just one or two of the methods. For more able students you may want to make the amounts more difficult. If so, change the content of the Word version accordingly.

During the activity

Students could work individually or in pairs, with each person using a different method.

Points for discussion

Discuss the advantages and disadvantages of the methods used. Include reasons why it is advisable to check work using a different method.

Extensions

With mixed ability groups, you may decide to ask some students to concentrate on Worksheet A whilst others do both Worksheets A and B. More able students may also be able to set up their own spreadsheet for working out VAT at 5%, whereas others may just follow the instructions given on Worksheet C to find VAT at 20%.

Answers

(Above right) Worksheets A and C
(Right) Worksheets B and C

Question	Amount	VAT	Total price
1	£75.00	£15.00	£90.00
2	£64.00	£12.80	£76.80
3	£83.00	£16.60	£99.60
4	£140.00	£28.00	£168.00
5	£460.00	£92.00	£552.00
6	£590.00	£118.00	£708.00
7	£275.00	£55.00	£330.00
8	£330.00	£66.00	£396.00

Question	Amount	VAT	Total price
1	£180.00	£9.00	£189.00
2	£328.00	£16.40	£344.40
3	£73.00	£3.65	£76.65
4	£281.00	£14.05	£295.05