

**Business Mathematics (BK/IBA) – Quantitative Research Methods I (EBE)**  
**Digital test 1**

**Question 1**

b)

|                |            |
|----------------|------------|
| Family name    | Galt       |
| Given name     | John       |
| Student number | 1234567    |
| Programme      | BK         |
| Date           | 15/09/2015 |

**Question 2**

a)

$$\mathbf{b} \cdot \mathbf{c} = \|\mathbf{b}\| \|\mathbf{c}\| \cos \phi$$

b)

$$\forall i: x_i \leq 0 \Rightarrow \begin{cases} \prod_{i=1}^n x_i \leq 0 & \text{if } n \text{ is odd} \\ \prod_{i=1}^n x_i \geq 0 & \text{if } n \text{ is even} \end{cases}$$

**Question 3**

b)

|         |  |
|---------|--|
| Formula | =B2/SUM(B:B)<br>or<br>=B2/SUM(B\$2:B\$259) |
|---------|--|

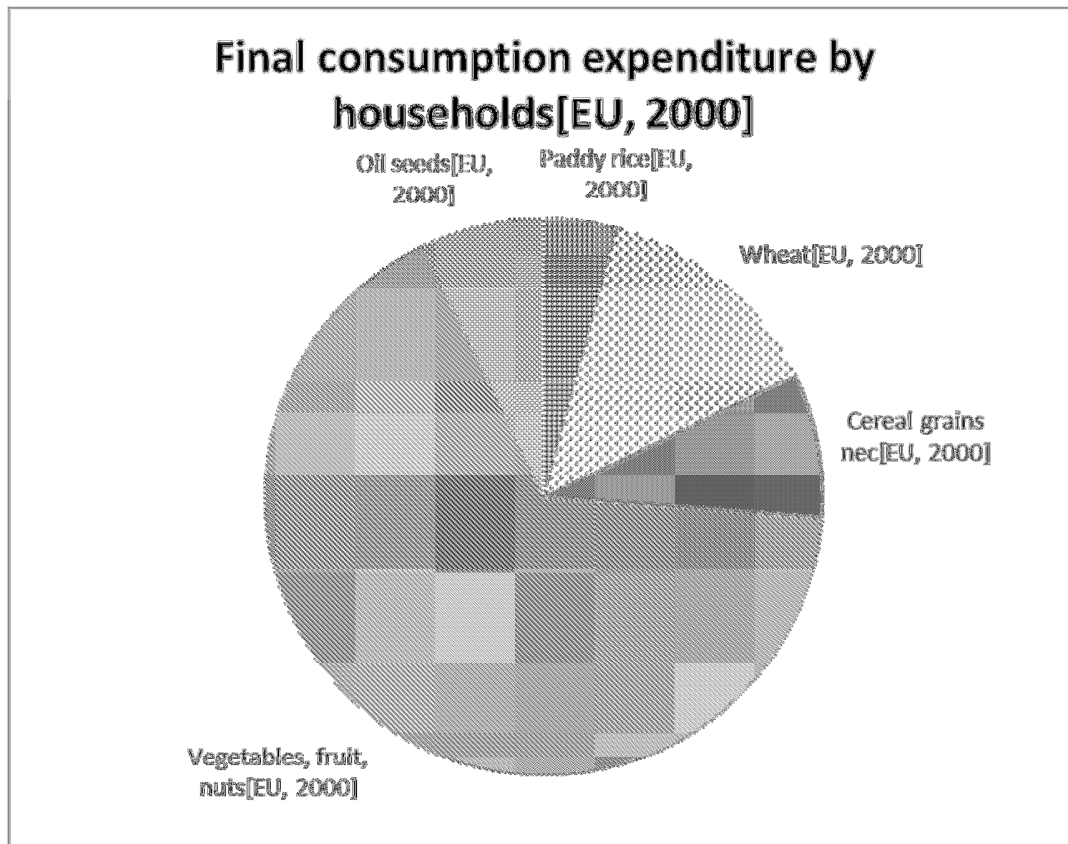
c)

|         |  |
|---------|--|
| Formula | =COUNTIF(F:F;"<0")<br>or<br>=COUNTIF(F2:F259;"<0")<br>or<br>=COUNTIF(F\$2:F\$259;"<0") |
|---------|--|

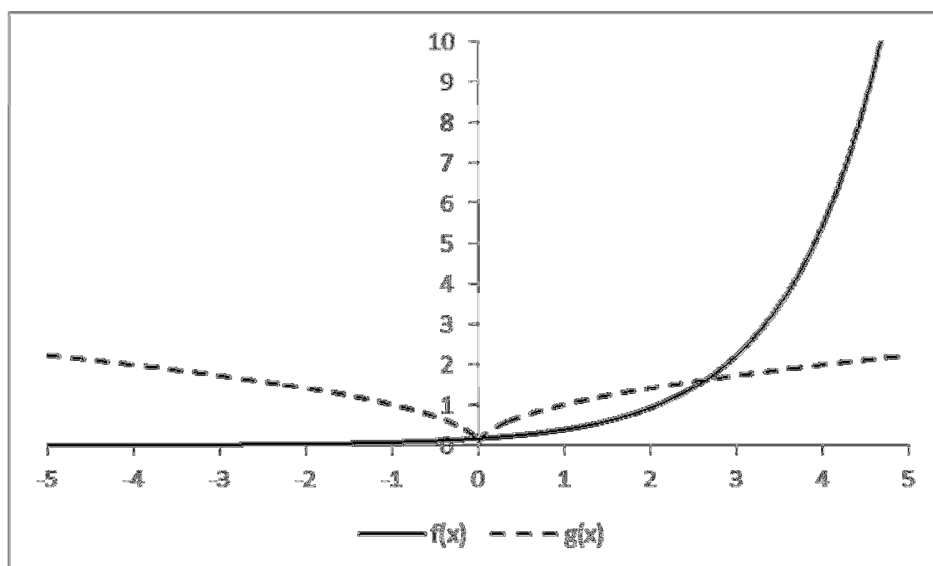
d)

|         |   |
|---------|---|
| Formula | =IF(B2>=100;B2;"negligible")<br>or<br>=IF(B2<100;"negligible";B2) |
|---------|---|

e)



f)



Do not forget to save this file regularly!