

1. Work out an estimate for

|          |                  |  |          |                  |  |
|----------|------------------|--|----------|------------------|--|
| <i>a</i> | $8.2 \times 5.1$ |  | <i>e</i> | $4.2 \times 6.1$ |  |
| <i>b</i> | $8.1 \times 2.3$ |  | <i>f</i> | $7.2 \times 9.4$ |  |
| <i>c</i> | $9.2 \times 4.3$ |  | <i>g</i> | $6.1 \times 2.2$ |  |
| <i>d</i> | $3.4 \times 7.1$ |  | <i>h</i> | $3.4 \times 5.3$ |  |

You may match with

|              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| $3 \times 5$ | $3 \times 7$ | $4 \times 6$ | $6 \times 2$ | $7 \times 9$ | $8 \times 2$ | $8 \times 5$ | $9 \times 4$ |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|

and

12      15      16      21      24      36      40      63

2. Keith writes down the following

$$5.3 \times 6.1 = 323.3$$

Without doing the exact calculation, explain why Keith’s answer cannot be correct.

.....  
 .....

3. Work out an estimate for  $7.2 \times 3.3$

3. ....

4. A teacher writes down this calculation

$$5.4 \times 9.1$$

and four possible answers.

0.4914                      4.914                      49.14                      491.4

The teacher says “One of these answers is correct”

Without doing the exact calculation, write the correct answer and explain how you know.

.....  
 .....

Answers 1a)  $8 \times 5 = 40$  b)  $8 \times 2 = 16$  c)  $9 \times 4 = 36$  d)  $3 \times 7 = 21$  e)  $4 \times 6 = 24$   
 f)  $7 \times 9 = 63$  g)  $6 \times 2 = 12$  h)  $3 \times 5 = 15$  2)  $5 \times 6 = 30$  but  $323.3 \approx 300$  not 30  
 or Keith’s answer could be 32.33 but not 323.3 3) 21 4)  $5 \times 9 = 45 \approx 49.14$