1. For her carpentry coursework, Gilyaz asked 19 carpenters how much they earned yesterday. This information is shown in the stem and leaf diagram.

```
0 | 8  9
1 | 1  2  6  7  7  8  8  9
2 | 1  2  2  2  5  6
3 | 2  5  7
```

Key: 2|1 = £ 210

(a) Write down the mode.

£ . . . .

(b) Work out the range.

£ . . . .

(c) Work out the interquartile range.

£ . . . .

2. Ms Davies timed how long it took for her year 7 class to get out and open their planners. The stem and leaf diagram shows the data for her 31 students.

```
 6 | 3 7
 7 | 2 3 6 7 9
 8 | 0 1 2 5 5 6 8 9
 9 | 1 2 3 5 5 5 6 7 9 9        Key: 7|2 = 7.2 seconds
10 | 0 3 7
11 | 2 5 9
```

(a) Work out the median.

.... seconds

(b) Work out the mode.

.... seconds

(c) Work out the range.

.... seconds

(d) Work out the interquartile range.

.... seconds

3. The stem and leaf diagram gives information about 19 teachers annual wage.

```
2 | 2  2  2  4  6  8  8
3 | 0  0  0  0  1  2  5  8  9        Key: 2|2 = £ 22 000
4 | 1  1  5
```

(a) Work out the mode.

£ . . . .

(b) Work out the range.

£ . . . .

(c) Work out the upper quartile.

£ . . . .

A teacher is chosen at random.

(d) Work out the probability the teacher earns over £30 000.

(d) . . . .

Answers

1. (a) £ . . . . **220** . . . .

   (b) £ . . . . **290** . . . .

   (c) £ . . . . . **90** . . . . .

   FYI: *M1 for LQ 160 or UQ or 250 or attempt to find quartiles*

2. (a) . . . . . **9.1** . . . . . seconds

   (b) . . . . . **9.5** . . . . . seconds

   (c) . . . . . **5.6** . . . . . seconds

   FYI: *M1 for 56 or 11.9 - 6.3*

   (d) . . . . . **1.9** . . . . . seconds

   FYI: *M1 for LQ 8.0 or UQ or 9.9 or attempt to find quartiles*

3. (a) £ . . . **30 000** . . .

   (b) £ . . . **23 000** . . .

   FYI: *M1 for 23 or 45 000 - 22 000 or 45 - 22*

   (c) £ . . . **38 000** . . .

   (d) (d) . . . . . $\frac{8}{19}$ . . . . .