## Stem \& Leaf Diagrams

## Exercise 1

1) This stem and leaf diagram shows the distance travelled by a taxi on different hires.
a) Write out level 3 in full.
b) How many journeys are shown?
c) What is the second longest journey?
d) If journeys of length 25 km or less are classed as Type A journeys, How many journeys were there?

|  | km travelled |
| :---: | :---: |
| 1 | 467 |
| 2 | 34489 |
| 3 | 027 |
| 4 | 2 |
| $\mathrm{n}=12$ |  |
|  | 3 represents 23 |

2) This stem and leaf diagram shows the distance travelled by a taxi on different hires.
a) Write out level 3 in full.
b) How many journeys are shown?
c) What is the second longest journey?
d) If journeys of length 25 km or less are classed as Type A journeys, how many Type A journeys were there?
km travelled

| 0 | 56 |
| :--- | :--- |
| 1 | 378 |
| 2 | 2289 |
| 3 | 4 |
| 4 | 23 |

$\mathrm{n}=12$
2| 1 represents 21 km
3) This stem and leaf diagram shows the distance travelled by a taxi on different hires.
a) Write out level 3 in full.
b) How many journeys are shown?
c) What is the second longest journey?
d) If journeys of length 25 km or less are classed as Type A journeys, how many Type A journeys were there?

## km travelled

1257<br>244678<br>31236<br>44<br>5<br>64<br>$\mathrm{n}=15$<br>2| 1 represents 21 km

4) This stem and leaf diagram shows the concentration level of a chemical in a number of samples
a) Write out level 7 in full.
b) A level of 85 or below is safe. How many safe samples are there?
c) How many samples were unsafe?
d) What is the average concentration of the safe samples?
units of chemical

| 6 | 8 |
| :--- | :--- |
| 7 | 237 |
| 8 | 488 |
| 9 | 18 |
| 10 | 3468 |
| 11 | 25 |

$\mathrm{n}=15$
8|1 represents 81 units
5) This stem and leaf diagram shows the concentration level of a chemical in a number of samples
a) Write out level 7 in full.
b) A level of 85 or below is safe. How many safe samples are there?
c) How many samples were unsafe?
d) What is the average concentration of the safe samples?

| units of chemical |  |
| :--- | :--- |
| 5 | 4 |
| 6 |  |
| 7 | 2889 |
| 8 | 36777 |
| 9 | 025 |
| 10 | 8 |
| $n$ |  |
| $n$ | 14 |
| 84 | represents 84 units |

6) This stem and leaf diagram shows the concentration level of a chemical in a number of samples
units of chemical
a) Write out level 7 in full.
b) A level of 85 or below is safe. How many safe samples are there?
c) How many samples were unsafe?
d) What is the average concentration of the safe samples?


|  | nits of chemical |
| :---: | :---: |
| 36 |  |
| 4 | 589 |
| 5 | 234479 |
| 6 | 0138 |
| 7 | 259 |
| 8 | 38 |
| 9 | 4 |
| $\mathrm{n}=20$ |  |
| 814 represents 84 units |  |

7) The times, in seconds to run a race for competitors is given in the stem and leaf diagram.
a) What was the winning time?
b) How many sub 10 second times were there??
c) What percentage of the competitors had a time of less than 12 secs?
d) Write out level 10 in full.

time (seconds)

| 9 | 89 |
| :--- | :--- |
| 10 | 278 |
| 11 | 5689 |
| 12 | 0238 |
| 13 | 7 |

$n=14$
11|9 represents
11.9 seconds
8) The times, in seconds to run a race for competitors is given in the stem and leaf diagram.
a) What was the winning time?
b) How many sub 10 second times were there??
c) What percentage of the competitors had a time of less than 12 secs?
d) Write out level 10 in full.

time (seconds)

| 8 | 9 |
| :--- | :--- |
| 9 | 28 |
| 10 | 4667 |
| 11 | 056 |
| 12 | 34588 |
| 13 | 278 |

$\mathrm{n}=18$
11|6 represents
11.6 seconds

