1) $3+2+5+6=16$
$16 \div 4=4$
The mean number of goals scored was 4.
2) $85+60+65+70+65=345$
$345 \div 5=69$
The mean rainfall for the 5 months was 69 mm .
3) Jacob: $90 \div 6=15$

Emily: $108 \div 6=18$
Adil: $96 \div 6=16$

|  | Jacob | Emily | Adil |
| :---: | :---: | :---: | :---: |
| Week 1 | 13 | 18 | 19 |
| Week 2 | 20 | 20 | 18 |
| Week 3 | 16 | 17 | 20 |
| Week 4 | 17 | 18 | 15 |
| Week 5 | 10 | 15 | 7 |
| Week 6 | 14 | 20 | 17 |
| Mean <br> Score | $\mathbf{1 5}$ | $\mathbf{1 8}$ | $\mathbf{1 6}$ |

1) a) False - group $A$ contains the tallest child ( 140 cm ) but the group's mean height of 130 cm is the shortest.
b) False - group C has the most children but the tallest mean height of 132 cm .
c) True - group A would now have a mean height of 133 cm , which is 1 cm taller than group C's and $\mathbf{2 c m}$ taller than group $B$ 's.
2) a) True - Ola's mean lap time was 65 seconds and Jessica's was 61 seconds. This means that Ola's time was 4 seconds slower.
b) False - Usman's mean lap time was 58 seconds, which is less than one minute.
c) False - when added together, Henry and Usman had a mean lap time of 65 seconds whereas Jessica and Ola had a mean lap time of 63 seconds. Jessica and Ola's mean time was therefore $\mathbf{2}$ seconds faster than Henry and Usman's.
3) Missing values are given in the table.

|  | Ava | Brody | Chen |
| :---: | :---: | :---: | :---: |
| Throw 1 | 8.4 | 8 | 11.2 |
| Throw 2 | 7.9 | 7.1 | 9.4 |
| Throw 3 | 10.4 | 6.2 | 8.3 |
| Throw 4 | 8.6 | 7 | 6.1 |
| Throw 5 | 6.6 | 8.8 | 9.6 |
| Throw 6 | 9.1 | b) 7.9 | c) 9.4 |
| Mean <br> Average <br> Distance <br> Thrown | a) $\mathbf{8 . 5}$ | 7.5 | 9 |

2) There are two possibilities:

Morgan, Aleena and Oscar;
Olivia, Felix and Aleena.
3) There are various possibilities. Accept sets of four numbers which have a total of 40, for example:

9, 11, 7 and 13;
12, 8, 15 and 5;
6, 14, 10 and 10.

