

S054 Averages and range

- ① a) 6
b) 5.5
c) 7

- ② i) 35
ii) 4
iii) 3.7

- ③ a) 9
b)
- | | boys | girls |
|----------|------|-------|
| median : | 9 | 9 |
| mean : | 9.6 | 10 |
| range : | 7 | 8 |

mean for girls is higher \therefore girls used their mobile phone more on average however their data is more spread (higher range)

- ④ a) i) 2.23
ii) 2.264
iii) 0.14

b) mean for men was greater so they did better in high jump. range was also smaller so data for men was more consistent.

- ⑤ a) 2
b) 11
c) 4

- ⑥ a) 1
b) 1.8
c) greater, $4+2 > 2 \times 1.8$

- ⑦ a) 13
b) 11.5
c) 15

- ⑧ 30

- ⑨ No, $\frac{4 \times 5 + 5 \times 9 + 1 \times 6}{10} > 7$

- ⑩ 10

- ⑪ Yes, $33 \times 11 - 35 \times 10 = 13$

- ⑫ a) 10
b) mean is reduced

- ⑬ greater than, $\frac{70 \times 10 + 80 \times 15}{25} > 75$