

September 10<sup>th</sup>

Four numbers are written in a row.

The mean of the first two is 5.5

The mean of the middle two is 6.5

The mean of the last two is 15.



Find the mean of the first and last numbers.

$$a + b = 11 \quad (1)$$

$$b + c = 13 \quad (2)$$

$$c + d = 30 \quad (3)$$

(1) – (2) gives

$$a - c = -2 \quad (4)$$

(4) + (3) gives

$$a + d = 28$$

Hence

**the mean of the first and last numbers is 14**