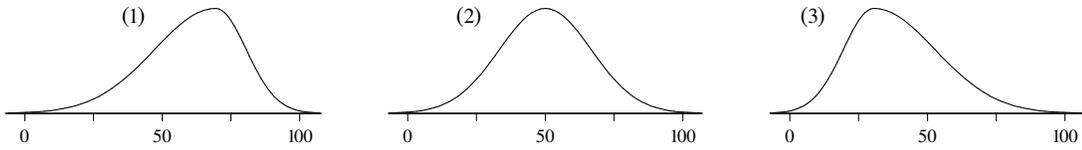


4. Below are sketches of the histograms for three data sets.

- (a) In scrambled order, the averages are: 40, 50, 60; **match** the histograms with the averages.
- (b) The standard deviation of histogram (3) is closest to: 5, 15, 50? Choose **one** option and explain briefly.
- (c) The standard deviation of histogram (1) is *a lot* smaller than that of histogram (3): **True** or **False**? Explain briefly.

**MARKS**

3  
(1, 1, 1)



**MARKS**

2

5. The average and median salaries of major league baseball players in 1993 were \$490,000 and \$1,160,000. Which of these two values is the **average** and which is the **median**? Explain your reasoning briefly.

\$

Average

\$

Median

6. In a large class, the female students averaged 5' 6" in height, with a standard deviation of 8 cm; the male students averaged 175 cm in height with a standard deviation of 8 cm;

**MARKS**

4  
(1, 2, 1)

- (a) If there were 150 females and 150 males in the class, find the average height of all 300 class members.
- (b) For all 300 class members, the standard deviation of height will be: (1) quite a bit **less** than 8 cm; (2) about 8 cm; (3) quite a bit **more** than 8 cm. Choose **one** of these three options and explain your reasoning briefly.
- (c) If there were 200 females and 100 males in the class, find the average height of all 300 class members.

(a)

(a)

Average

(b)

(b)

Option number

(c)

(c)

Average