

## Math 9 Assignment 7: Statistics (solutions)

1. What is the mean of 3, 5, and 25?

$$Av = \frac{3+5+25}{3} = 11$$

2. What is the average of the numbers 1, 10, 60, 100.

$$Av = \frac{1+10+60+100}{4} = \frac{171}{4}$$

3. 2, 7,  $k$

Given the mean is 9, find  $k$

$$9 = \frac{2+7+k}{3}$$

$$27 = 9 + k$$

$$18 = k$$

4. Find the median of the following numbers:

- a. 10, 20, 40, 45, 60, 100, 2000

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- b. 5, 20, 40, 4000

$$\frac{20+40}{2} = 30$$

- c. -10, 5, 200, 5000, -100

-100, -10, 5, 200, 5000

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5. Find the range of the numbers 20, -40, 1, 90

$$90 - (-40) = 90 + 40 = 130$$

6. Find the average of the numbers  $0.8\frac{2}{3}$ , -5, and 200%

$$\frac{8}{10}, \frac{2}{3}, -5, 2$$

$$Av = \frac{\frac{4}{5} + \frac{2}{3} - 5 + 2}{4} = -\frac{23}{60} \approx -0.38\bar{3}$$

7. True or False: As ice cream sales increase, the rate of drowning deaths increases sharply. Therefore, ice cream consumption causes drowning.  
False