

1. Rentals: \$1550, \$1700, \$900, \$850, \$1000, \$950.

- Mean = $\text{Sum}(\$1550, \$1700, \$900, \$850, \$1000, \$950)/6 = \$1158.33$
- Standard Deviation = $\sqrt{((1550-1158.333)^2 + (1700-1158.333)^2 + (900-1158.333)^2 + (850-1158.333)^2 + (1000-1158.333)^2 + (950-1158.333)^2)/6} = \335.93

2. Tree heights in California: 3, 21, 98, 203, 17, 9

- Mean = $\text{Sum}(3, 21, 98, 203, 17, 9)/6 = 58.5$
- Variance = $((3-58.5)^2 + (21-58.5)^2 + (98-58.5)^2 + (203-58.5)^2 + (17-58.5)^2 + (9-58.5)^2)/6 = 5183.25$

3. In a class of 100 students, 80 students passed in all subjects, 10 failed in one subject, 7 failed in two subjects and 3 failed in three subjects.

$$F_x(0) = P(X=0) = 80/100 = 0.8$$

$$F_x(1) = P(X=1) = 10/100 = 0.1$$

$$F_x(2) = P(X=2) = 7/100 = 0.07$$

$$F_x(3) = P(X=3) = 3/100 = 0.03$$