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Grado: 5TO

Carrera: Bachillerato en ciencias y letras con diplomado
en medicina

Curso: Estadística

Semana 15 / Lección 5.1

a) 35, 20, 15, 5, 3, 5, 6, 21

$Q_1 = \frac{K(n+1)}{4} = \frac{1(8+1)}{4} = \frac{1(9)}{4} = \frac{9}{4} = 2.25$

$Q_1 = 5 + (5-5)(0.25)$
 $Q_1 = 5 + (0)(0.25)$
 $Q_1 = 5.25$ **R/ El cuartil 1 es 5.25**

$Q_2 = \frac{K(n+1)}{4} = \frac{2(8+1)}{4} = \frac{2(9)}{4} = \frac{18}{4} = 4.5$

$Q_2 = 6 + (15-6)(0.5)$
 $Q_2 = 6 + (9)(0.5)$
 $Q_2 = 6 + 4.5$
 $Q_2 = 10.5$ **R/ El cuartil dos es 10.5**

$Q_3 = \frac{K(n+1)}{4} = \frac{3(8+1)}{4} = \frac{3(9)}{4} = \frac{27}{4} = 6.75$

$Q_3 = 20 + (21-20)(0.75)$
 $Q_3 = 20 + (1)(0.75)$
 $Q_3 = 20 + 0.75$
 $Q_3 = 20.75$ **R/ El cuartil tres es 20.75**

b) 15, 22, 30, 18, 50, 81
75, 18, 22, 30, 50, 81

$$Q_1 = \frac{K(n+1)}{4} = \frac{1(6+1)}{4} = \frac{1(7)}{4} = \frac{7}{4} = 1.75$$

$$Q_1 = 15 + (18 - 15)(0.75)$$

$$Q_1 = 15 + (3)(0.75)$$

$$Q_1 = 15 + 2.25$$

$$Q_1 = 17.25$$

R/ El cuartil uno es 17.25

$$Q_2 = \frac{K(n+1)}{4} = \frac{2(6+1)}{4} = \frac{2(7)}{4} = \frac{14}{4} = 3.5$$

$$Q_2 = 22 + (30 - 22)(0.5)$$

$$Q_2 = 22 + (8)(0.5)$$

$$Q_2 = 22 + 4$$

$$Q_2 = 26$$

R/ El cuartil dos es 26

$$Q_3 = \frac{K(n+1)}{4} = \frac{3(6+1)}{4} = \frac{3(7)}{4} = \frac{21}{4} = 5.25$$

$$Q_3 = 50 + (81 - 50)(0.25)$$

$$Q_3 = 50 + (31)(0.25)$$

$$Q_3 = 50 + 7.75$$

$$Q_3 = 57.75$$

R/ El cuartil tres es 57.75

c) 22, 14, 16, 41
14, 16, 22, 41

$$Q_1 = \frac{K(n+1)}{4} = \frac{1(4+1)}{4} = \frac{1(5)}{4} = \frac{5}{4} = 1.25$$

$$Q_1 = 14 + (16 - 14)(0.25)$$

$$Q_1 = 14 + (2)(0.25)$$

$$Q_1 = 14 + 0.5$$

$$Q_1 = 14.5$$

R/ El cuartil uno es 14.5

$$Q_2 = \frac{K(n+1)}{4} = \frac{3(4+1)}{4} = \frac{3(5)}{4} = \frac{15}{4} = 3.75$$

$$Q_2 = 16 + (22 - 16)(0.75)$$

$$Q_2 = 16 + (6)(0.75)$$

$$Q_2 = 16 + 3$$

$$Q_2 = 19$$

R/ El cuartil dos es 19

$$Q_3 = \frac{K(n+1)}{4} = \frac{3(4+1)}{4} = \frac{3(5)}{4} = \frac{15}{4} = 3.75$$

$$Q_3 = 22 + (41 - 22)(0.75)$$

$$Q_3 = 22 + (19)(0.75)$$

$$Q_3 = 22 + 14.25$$

$$Q_3 = 36.25$$

R/ El cuartil tres es 36.25