



Instituto Privado

“Rafael Arévalo Martínez”

Nombre de la Estudiante: Melva Saraí Aguirre Rodas

Nombre del Catedrático: Fredy Barrios

Carrera: Magisterio de Educación Preprimaria

Grado: 5to.

Curso: Estadística

Semana #6: Cuartiles

1. 35, 20, 15, 5, 3, 5, 6, 21 =

$$3 - \frac{5-5}{1} - \frac{6-15}{2} - \frac{20-21-35}{3}$$

$$Q_1 = 1 \left(\frac{8+1}{4} \right) = Q_1 = 1 \left(\frac{9}{4} \right) = Q_1 = \frac{9}{4} = Q_1 = \boxed{2.25}$$

$$Q = 5 + (5-5)(0.25) = Q = 5 + (0)(0.25) = 0$$

$$Q = 5 + 0 = \boxed{5}$$

$$Q_2 = 2 \left(\frac{8+1}{4} \right) = Q_2 = 2 \left(\frac{9}{4} \right) = Q_2 = \frac{18}{4} = Q_2 = \boxed{4.5}$$

$$Q = 6 + (15-6)(0.5) = Q = 6 + (9)(0.5) = 4.5$$

$$Q = 6 + 4.5 = \boxed{10.5}$$

$$Q_3 = 3 \left(\frac{8+1}{4} \right) = Q_3 = 3 \left(\frac{9}{4} \right) = Q_3 = \frac{27}{4} = Q_3 = \boxed{6.75}$$

$$Q = 20 + (21-20)(0.75) = Q = 20 + (1)(0.75) = 0.75$$

$$Q = 20 + 0.75 = \boxed{20.75}$$

$$2. 15, 22, 30, 18, 50, 81 =$$

$$\frac{15}{1} - \frac{18}{2} - \frac{22}{3} - \frac{30}{4} - \frac{50}{5} - \frac{81}{6}$$

$$Q_1 = 1 \left(\frac{6+1}{4} \right) = Q_1 = 1 \left(\frac{7}{4} \right) = Q_1 = \frac{7}{4} = Q_1 = 1.75$$

$$Q = 15 + (18 - 15) (0.75) = Q = 15 + (3) (0.75) = 2.25$$

$$Q = 15 + 2.25 = 17.25$$

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

$$Q = 22 + (30 - 22) (0.5) = Q = 22 + (8) (0.5) = 4$$

$$Q = 22 + 4 = 26$$

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

$$Q = 50 + (81 - 50) (0.25) = Q = 50 + (31) (0.25) = 7.75$$

$$Q = 50 + 7.75 = 57.75$$

$$3. 22, 14, 16, 41 =$$

$$\begin{array}{ccc} 14 & - & 16 & - & 22 & - & 41 \\ 1 & & 2 & & 3 & & \end{array}$$

$$Q_1 = 1 \left(\frac{4+1}{4} \right) = Q_1 = 1 \left(\frac{5}{4} \right) = Q_1 = \frac{5}{4} = Q_1 = \boxed{1.25}$$

$$Q = 14 + (16 - 14)(0.25) = Q = 14 + (2)(0.25) = 0.5$$

$$Q = 14 + 0.5 = \boxed{14.5}$$

$$Q_2 = 2 \left(\frac{4+1}{4} \right) = Q_2 = 2 \left(\frac{5}{4} \right) = Q_2 = \frac{10}{4} = Q_2 = \boxed{2.5}$$

$$Q = 16 + (22 - 16)(0.5) = Q = 16 + (6)(0.5) = 3$$

$$Q = 16 + 3 = \boxed{19}$$

$$Q_3 = 3 \left(\frac{4+1}{4} \right) = Q_3 = 3 \left(\frac{5}{4} \right) = Q_3 = \frac{15}{4} = Q_3 = \boxed{3.75}$$

$$Q = 22 + (41 - 22)(0.75) = Q = 22 + (19)(0.75) = 14.25$$

$$Q = 22 + 14.25 = \boxed{36.25}$$