

Exercício 5.1.

04-06-2021

a) 3, 5, 5, 6, 15, 20, 21, 30

$n = 8$
 $1 \quad 2 \quad 3 \quad 4$

$$Q_0 = 3 + (5 - 3)(0.5)$$

$$Q_0 = 3 + 0.5(2) = 4$$

$$Q_0 = 4$$

$$\text{ou } Q_1 = 5$$

$$Q_1 = \frac{K(n+1)}{4} = \frac{2(6+1)}{4} = \frac{14}{4} = 3.5$$

$$Q_1 = 6 + (15 - 6)(0.5)$$

$$Q_1 = 6 + 4.5 = 10.5$$

$$Q_1 = 10.5$$

$$\text{ou } Q_2 = 10.5$$

$$Q_2 = \frac{K(n+1)}{4} = \frac{3(8+1)}{4} = \frac{27}{4} = 6.75$$

$$Q_2 = 20 + (21 - 20)(0.75)$$

$$Q_2 = 20 + 0.75 = 20.75$$

$$Q_2 = 20.75$$

$$\text{ou } Q_3 = 20.75$$

$$Q_1 = 15, Q_2 = 20, Q_3 = 11$$

$$Q_1 = 15 + (17 - 15)(0.5)$$

$$Q_1 = 15 + 1.25$$

$$Q_1 = 16.25$$

$$Q_1 = 17.25$$

$$Q_1 = 17.25$$

$$Q_2 = \frac{K(n+1)}{4} = \frac{2(16+1)}{4} = \frac{34}{4} = 8.5$$

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

$$Q_2 = 22 + 4$$

$$Q_2 = 26$$

$$Q_2 = 26$$

$$Q_3 = \frac{K(n+1)}{4} = \frac{2(16+1)}{4} = \frac{34}{4} = 8.5$$

$$Q_3 = 50 + (71 - 50)(0.25)$$

$$Q_3 = 50 + 7.75$$

$$Q_3 = 57.75$$

$$Q_3 = 57.75$$

Q_1, Q_2, Q_3

1) 14, 16, 22, 41

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

$$Q_1 = 14 + (16 - 14)(1.25)$$

$$Q_1 = 14 + 0.5$$

$$Q_1 = 14.5$$

$$\text{r// } Q_1 = 14.5$$

$$Q_2 = \frac{k(n+1)}{4} = \frac{2(4+1)}{4} = \frac{10}{4} = 2.5$$

$$Q_2 = 16 + (22 - 16)(2.5)$$

$$Q_2 = 16 + 5$$

$$Q_2 = 19$$

$$\text{r// } Q_2 = 19$$

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

$$Q_3 = 22 + (41 - 22)(3.75)$$

$$Q_3 = 22 + 14.25$$

$$Q_3 = 36.25$$

$$\text{r// } Q_3 = 36.25$$

1) 12, 14, 16, 18, 21, 21, 22, 22

$$Q_1 = \frac{K(n+1)}{4} = \frac{1(9+1)}{4} = \frac{10}{4} = 2.5$$

$$Q_1 = 1 + 1(12 - 1)(0.5)$$

$$Q_1 = 14 + 1$$

$$Q_1 = 15$$

$$\text{E// } Q_1 = 15$$

$$Q_2 = \frac{K(n+1)}{4} = \frac{2(9+1)}{4} = \frac{20}{4} = 5$$

$$\text{E// } Q_2 = 5$$

$$Q_3 = \frac{K(n+1)}{4} = \frac{3(9+1)}{4} = \frac{30}{4} = 7.5$$

$$Q_3 = 21 + (22 - 21)(0.5)$$

$$Q_3 = 21 + 0.5$$

$$Q_3 = 21.5$$

$$\text{E// } Q_3 = 21.5$$

Q_1	Q_2	Q_3	
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2) 8, 11, 12, 14, 15, 21, 22, 30, 30, 48

$$Q_1 = \frac{K(n+1)}{4} = \frac{1(10+1)}{4} = \frac{11}{4} = 2.75$$

$$Q_1 = 8 + (12 - 8)(0.75)$$

$$Q_1 = 8 + 0.75$$

$$Q_1 = 8.75$$

$$211Q_1 = 11.75$$

$$Q_2 = \frac{K(n+1)}{4} = \frac{1(10+1)}{4} = \frac{11}{4} = 2.75$$

$$Q_2 = 12 + (15 - 12)(0.5)$$

$$Q_2 = 12 + 1.5$$

$$Q_2 = 13.5$$

$$211Q_2 = 19.5$$

$$Q_3 = \frac{K(n+1)}{4} = \frac{3(10+1)}{4} = \frac{33}{4} = 8.25$$

$$Q_3 = 30 + (30 - 30)(0.25)$$

$$Q_3 = 30 + 0$$

$$Q_3 = 30$$

$$211Q_3 = 30$$