

①

2, 3, 4, 5, 5, 6, 7, 8, 9, 10, 10, 11, 11, 12, 13

a) 30% = 2-5

$$D_3 = \frac{3 \cdot 15}{10} = 4.5$$

$$D_3 = 4.5 \approx 5^{\#}$$

b) 75% = 2-10

$$Q_3 = \frac{3 \cdot 15}{4} = 11.25$$

$$Q_3 = 11.25 \approx 11^{\#}$$

c) 43% = 2-6

$$P_{43} = \frac{43 \cdot 15}{100} = 6.45$$

$$P_{43} = 6.45 \approx 6^{\#}$$

②

40, 47, 50, 51, 55, 55, 58, 64, 66, 66, 69, 69, 70, 73, 73, 74, 75, 77, 79, 80

a) ¿Qué porcentaje pesa más de 60 kg? 40%.

$$\text{Cuantil} = \frac{K \cdot n}{c}$$

$$\# 8 = \frac{? \cdot 20}{100}$$

$$\frac{8 \times 100}{20}$$

$$\frac{800}{20} = 40\%$$

b) 75% = 40-75

$$P_{75} = \frac{75 \cdot 20}{100} = P_{75} = \frac{1500}{100} = 15$$

c) 28% = 40-55

$$P_{28} = \frac{28 \cdot 20}{100} = 5.6$$

$$P_{28} = \frac{560}{100} = 5.6 \approx 6$$

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EDADES	f_i	F_i
0-10	10	10
10-20	12	22
20-30	15	37
30-40	14	51
40-50	9	60

a) 40% = 0.4 = 0-21

40% = $P_4 = \frac{A - 60}{10} = 29$

$C = L_i + \left(\frac{\# - F_i^{-1}}{f_i} \right) \cdot a$ $C = 20 + \left(\frac{29 - 22}{15} \right) 10$

$C = 20 + \frac{20}{15} = 21.33$

b) 81% =

81% $\Rightarrow P_{81} = \frac{81 \cdot 60}{100}$

$P_{81} = 48.6 = 49$

$C = 30 + \left(\frac{49 - 37}{14} \right) \cdot 10$

$C = 30 + \left(\frac{12 \cdot 10}{14} \right)$

$C = 30 + \frac{120}{14} = 38.57$