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Alo



18.3-2

$$t^* = \frac{Q^*}{d} = 0.89443$$

↓  
semanas.

a)  $k = 40$   
 $h = 0.10$   
 $d = 1,000$

$$Q = \sqrt{\frac{2(1000)(40)}{0.10}} = 894.43$$

b)  $p = 3$

$$Q^* = \sqrt{\frac{2(1,000)(40)}{0.10}} \cdot \sqrt{\frac{3+0.10}{3}} = 909.21$$

$$S^* = \sqrt{\frac{2(1000)(40)}{0.10}} \cdot \sqrt{\frac{3}{3+0.10}} = 879.88$$

$$T^* = \frac{Q^*}{d} = 0.9092$$

18.3-6

a)  $d = 600$   
 $k = 575$   
 $n = 36,000$   
 $L = 0$

$$WD = 365$$

$$T = 20008$$

$$Q^* = \sqrt{\frac{2kD}{n}}$$

$$\frac{50^2}{2(75)(50)} = \frac{d}{n} \Rightarrow n = 35$$

$$Q^* = 43.3012$$

b)  $Q^* = 80$



18.3-1

$$K = 12000$$

$$h = 0.3$$

$$d = 8,000$$

$$P = 5$$

$$Q^* = \sqrt{\frac{2(8000)(12000)}{0.3}} \sqrt{\frac{5 + 0.3}{5}} = 26.03$$

$$S^* = \sqrt{\frac{2(8000)(12000)}{0.3}} \sqrt{\frac{5}{5 + 0.3}} = 24.52$$

$$T = \frac{Q}{d} = 3.25$$

18.3-13

$$\begin{aligned} a) \quad D &= 365 \\ K &= \$10 \\ I &= 0.1 \\ N &= 3 \end{aligned}$$

$$b) \quad \frac{D}{Q} = \frac{365}{124.63} = 2.93 \text{ Por año}$$

$$\text{Entre ordenones } \frac{Q}{D} = \frac{124.63}{365} = 0.343 \text{ (en años)}$$

18.3-14

$$T \Delta = 400(8.5) + 80 \frac{400}{Q} + 0.2(8.5) \frac{Q}{2} = 3,807.38$$

$$T 2 = 400(8.0) + 80 \frac{400}{Q} + 0.2(8.0) \frac{Q}{2} = 3,820$$

$$T 3 = 400(7.5) + 80 \frac{400}{Q} + 0.2(7.5) \frac{Q}{2} = 3,782$$

$$Q_1 = \sqrt{\frac{2(800)(400)}{0.2(8.5)}} = 19.1 = 19$$

$$Q_2 = \sqrt{\frac{2(800)(400)}{0.2(8)}} = 200 \checkmark$$

$$Q_3 = \sqrt{\frac{2(800)(400)}{0.2(7.5)}} = 207 = 1000$$

18.3-2

$$C_4 = C_5 + 2 = 2$$

$$C_3^{(3)} = C_4 + 2 = 4$$

$$C_3^{(4)} = 5.5 + 2 + 0.2(4) = 0.42 + 0.2(2) = 2.6$$

$$C_3 = \min\{4, 2.6\} = 2.6 \quad C_2^{(2)} = C_3 + 2 = 2.6 + 2 = 4.6$$

$$C_2 = C_3 + 2 = 2.6 + 2 = 4.6 \quad C_2^{(3)} = C_4 + 2 + 0.2(C_3) = 2 + 2 + 0.2(4) = 4.8$$

$$C_1^{(1)} = C_2 + 2 = 4 + 2 = 6 \quad C_1^{(4)} = C_3 + 2 + 0.2(C_2) = 2.6 + 2 + 0.2(3) = 5.2$$

$$C_1 = \min\{6, 5.2, 6.2, 6\} = 5.2 \checkmark$$