

inventory_replenishment_pingo - Questions

Q1. Which situation will reduce Service Level but may leave Fill Rate almost unchanged?

- A. Missing a large demand spike on a single day
- B. Fulfilling all demand but only after long delays
- C. Running out of stock on a low-demand day
- D. Supplier delivering early and increasing on-hand inventory

Correct answer: C. Running out of stock on a low-demand day

Q2. A stockout occurred on a day where demand was far above mean plus standard deviation, while lead time remained normal. What is the most likely root cause?

- A. Late supplier
- B. Demand spike
- C. Both demand spike and late supplier
- D. Insufficient dataset quality

Correct answer: B. Demand spike

Q3. If On-Hand Inventory is 480 units and recent average daily demand is 80 units, how many days of cover remain?

- A. 4 days
- B. 5 days
- C. 6 days
- D. 7 days

Correct answer: C. 6 days

Q4. Which change will increase Safety Stock the most, assuming all else equal?

- A. Reducing the service target (lower z-score)
- B. Lowering daily demand volatility (lower sigma)
- C. Increasing supplier lead time from 4 to 9 days
- D. Keeping sigma and L constant but increasing receipt quantity

Correct answer: C. Increasing supplier lead time from 4 to 9 days

Q5. You compute a Reorder Point (ROP) of 460 units. Current Inventory Position (On-Hand plus On-Order minus Backorders) is 390 units. What should happen next?

- A. No action; inventory is above the threshold
- B. Increase safety stock first, then decide
- C. Place a replenishment order now

D. Reduce demand temporarily to avoid stockouts

Correct answer: C. Place a replenishment order now