Problem Solving: Work Backward

Work backward to find each starting position.

1. **Starting** \((x, y)\). ________________
   - 4 units → (14, 20)
   - 2 units ↑ (14, 22)
   - 5 units ← (9, 22) Ending

2. **Starting** \((x, y)\). ________________
   - 2 units ↓ (5, 6)
   - 3 units → (8, 6)
   - 1 unit ↑ (8, 7) Ending

3. **Starting** \((x, y)\). ________________
   - 8 units ↑ (5, 13)
   - 4 units → (9, 13)
   - 6 units → (15, 13) Ending

4. Martha must finish her math quiz in 35 minutes. She knows that there are 10 multiple-choice questions and 5 word problems. If each word problem takes her exactly 3 minutes to complete, how much time can she spend on each multiple-choice question?

5. Kori arrived at school on time, at exactly 8:30 A.M. If it took him 15 minutes to walk to school, 10 minutes to eat breakfast, and 18 minutes to get ready, what time did he wake up this morning?
   - A 7:37 A.M.
   - B 7:47 A.M.
   - C 7:57 A.M.
   - D 8:07 A.M.

6. Jerry used his $100 gift certificate to go shopping. He bought pants for $25, a shirt for $15, and socks for $3. Then he bought a pair of shoes. Jerry still has $27 left. How much were the shoes that he bought? Explain how you know.