Basic Counting Principles

Total points = 20

1. a. $n = 8 + 7 + 3$ ✓
      $n = 18$ ways ✓
   b. $n = 8 \times 7 \times 3$ ✓
      $n = 168$ ways ✓
   c. $n = 7 \times (8 + 3)$ ✓
      $n = 77$ ways ✓
2. a. $n = 8 + 7$ ✓
      $n = 15$ ways ✓
   b. $n = 8 + 4$ ✓
      $n = 12$ ways ✓
   c. $n = 10$ ways ✓
3. a. $n = 8 \times 7$ ✓
      $n = 56$ ways ✓
   b. $n = (6 \times 5) + (8 \times 7) + (9 \times 8)$ ✓
      $n = 30 + 56 + 72$ ✓
      $n = 158$ ways ✓
   c. $n = 6 \times (8 + 9)$ ✓
      $n = 102$ ways ✓
   d. $n = 9 \times (8 + 6)$ ✓
      $n = 126$ ways ✓