Basic Counting Principles

Total points = 20

```
1. a. n = 8 + 7 + 3
          n = 18 ways \checkmark
      b. n = 8 \times 7 \times 3 \checkmark
          n = 168 ways √
       c. n = 7 \times (8+3) \checkmark
          n = 77 ways \checkmark
    a. n = 8 + 7 \checkmark
```

2. a.
$$n = 8 + 7 \checkmark$$

 $n = 15$ ways \checkmark

b.
$$n = 8 + 4 \checkmark$$

 $n = 12$ ways \checkmark

c.
$$n = 10$$
 ways \checkmark
a. $n = 8 \times 7$ \checkmark

3. a.
$$n = 8 \times 7 \checkmark$$

 $n = 56$ ways \checkmark

b.
$$n = (6 \times 5) + (8 \times 7) + (9 \times 8)$$
 \checkmark
 $n = 30 + 56 + 72$ \checkmark

$$n = 158$$
 ways \checkmark

c.
$$n = 6 \times (8+9)$$

$$n = 102$$
 ways \checkmark

d.
$$n = 9 \times (8+6)$$
 \checkmark $n = 126$ ways \checkmark

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