1. $B \cap G = \{5, 2, 0, 9, -2, 4, 8, 6\} \cap \{-1, 5, 2\} = \{5, 2\}$
On Venn diagram:

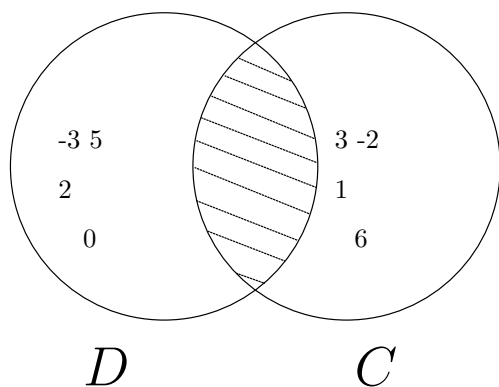```
      0
   9 4   5

   -2

     8 6   -2   -1

      B   G
```
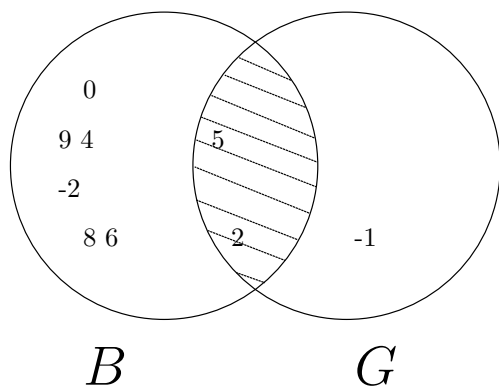
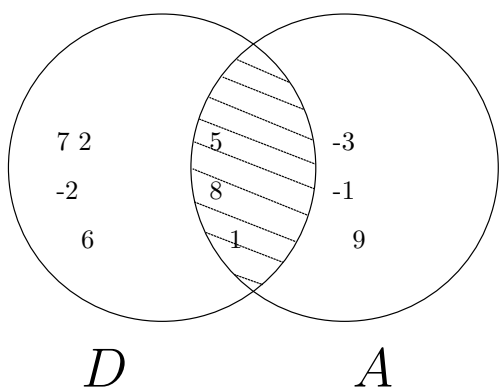**2.** $C \cap A = \{7, 4, 1, 6\} \cap \{6\} = \{6\}$
On Venn diagram:

```
    7


    4


    1         6


     C              A
```
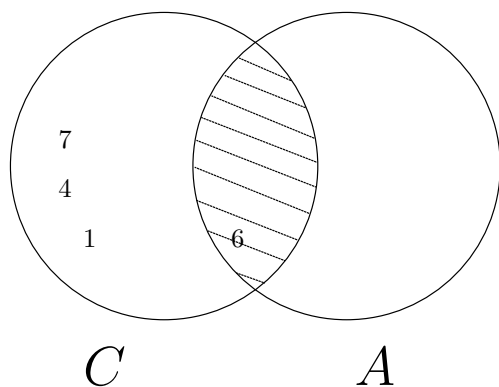
3. $D \cap C = \{-3, 5, 2, 0\} \cap \{3, -2, 6, 1\} = \emptyset$
On Venn diagram:

```
   -3 5         3 -2

    2            1

    0            6


     D              C
```

4. $D \cap A = \{5, 7, 2, -2, 8, 6, 1\} \cap \{-3, 5, -1, 9, 8, 1\} = \{5, 8, 1\}$
On Venn diagram:

D   A

Circle D contains: 7 2, -2, 6. Intersection contains: 5, 8, -1. Circle A contains: -3, -1, 9.

5. $E \cap A = \{-1, 7, 2, 9, 4, -2, 6, 1\} \cap \{5, 9\} = \{9\}$

On Venn diagram:

E   A

Circle E contains: -1, 7 2, -2 4, 1 6. Intersection contains: 9. Circle A contains: 5.