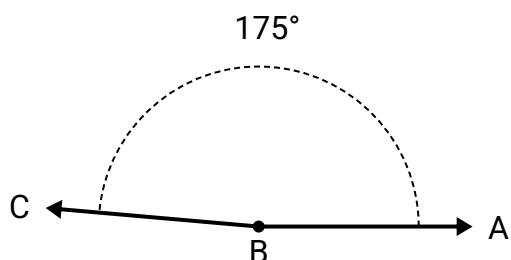Name:

Solve each problem.

1)

175°

C ← → A
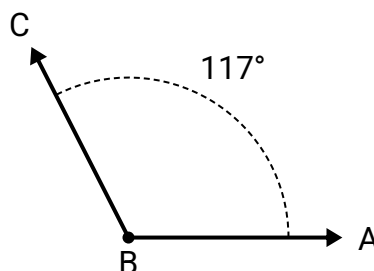B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 77 degrees.
B. What is the measure of angle ABD?

2)

C

117°

→ A
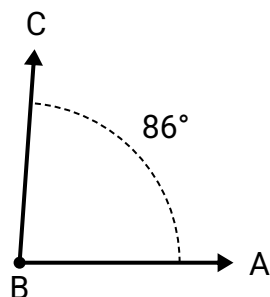B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 60 degrees.
B. What is the measure of angle DBC?

1. _____

2. _____

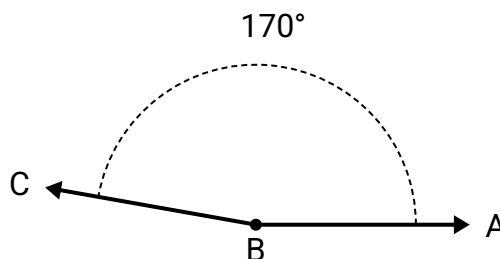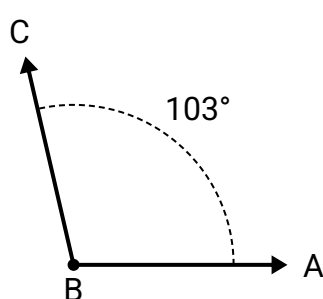3. _____

4. _____

5. _____

6. _____

3)

C

86°

→ A
B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 32 degrees.
B. What is the measure of angle DBC?

4)

170°

C ← → A
B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 136 degrees.
B. What is the measure of angle ABD?

5)

C

103°

→ A
B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 68 degrees.
B. What is the measure of angle DBC?

6)

C

120°

→ A
B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 35 degrees.
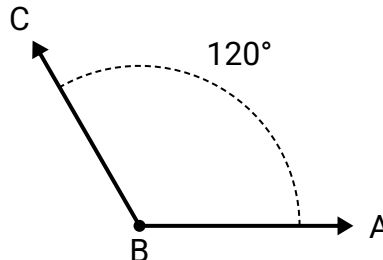B. What is the measure of angle DBC?

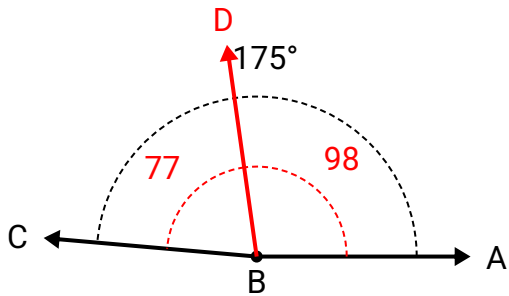**Math**   www.CommonCoreSheets.com

Name: **Answer Key**

Solve each problem.

1)

D
↑175°

77   98

C ←————•————→ A
        B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 77 degrees.
B. What is the measure of angle ABD?

2)

C   D
  1↑7°
  57
      60

  •————→ A
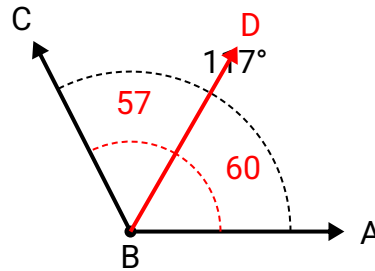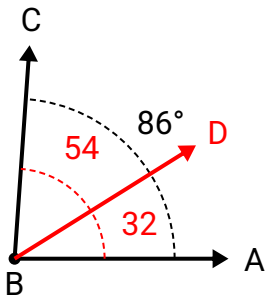 B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 60 degrees.
B. What is the measure of angle DBC?

1. **98°**

2. **57°**

3. **54°**

4. **34°**

5. **35°**

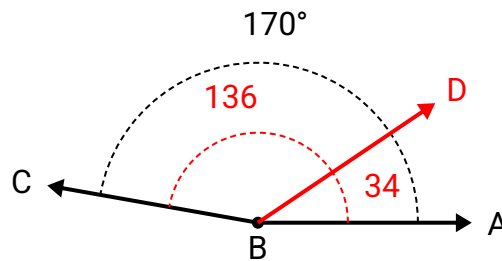6. **85°**

3)

C

      86° D
  54
      32
  •————→ A
  B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 32 degrees.
B. What is the measure of angle DBC?

4)

            170°
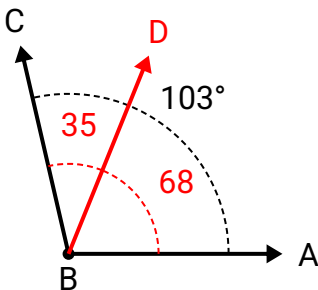   136   D

  C ←————•————→ A
          34
          B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 136 degrees.
B. What is the measure of angle ABD?

5)

C   D
  35   103°
       68
  •————→ A
  B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 68 degrees.
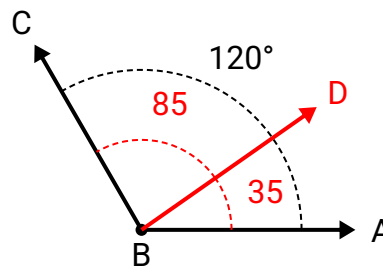B. What is the measure of angle DBC?

6)

C
        120°
    85   D
          35
  •————→ A
  B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 35 degrees.
B. What is the measure of angle DBC?