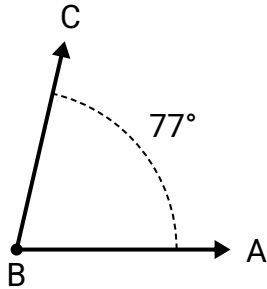# Adding a Ray and Calculating Angle

Name:

Solve each problem.

1)

C

77°

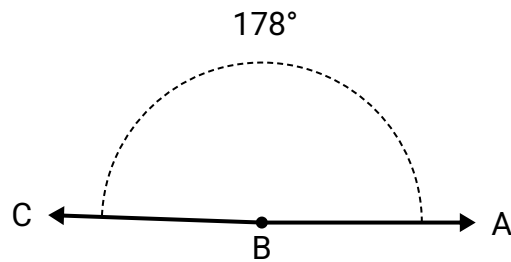B   A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 40 degrees.
B. What is the measure of angle ABD?

2)

178°

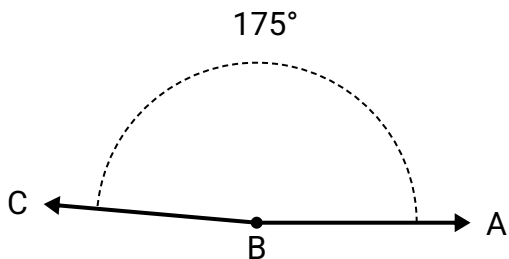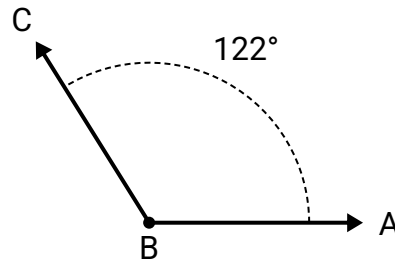C   B   A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 95 degrees.
B. What is the measure of angle ABD?

1. _____

2. _____

3. _____

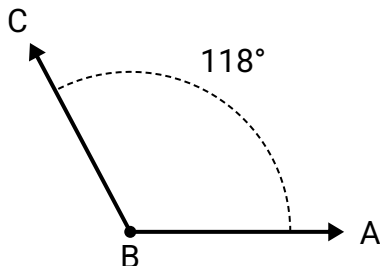4. _____

5. _____

6. _____

3)

175°

C   B   A

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?

4)

C

122°

B   A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 31 degrees.
B. What is the measure of angle ABD?

5)

C

118°

B   A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 56 degrees.
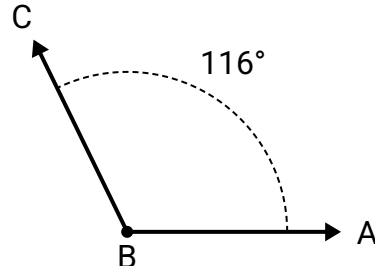B. What is the measure of angle DBC?

6)

C
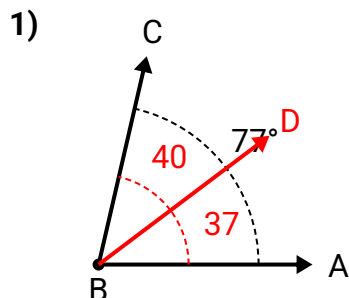
116°

B   A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 56 degrees.
B. What is the measure of angle DBC?

Math   www.CommonCoreSheets.com

Name: **Answer Key**

Solve each problem.

Answers

1)

C
77°D
40
37
B A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 40 degrees.
B. What is the measure of angle ABD?

2)

D
178°
95 83
C B A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 95 degrees.
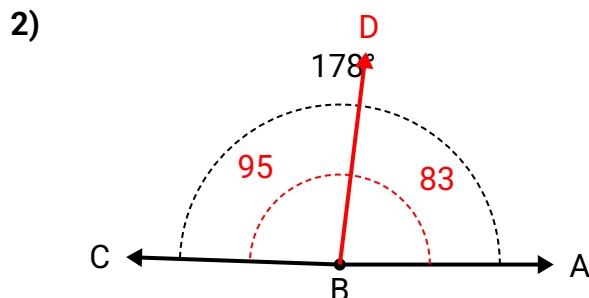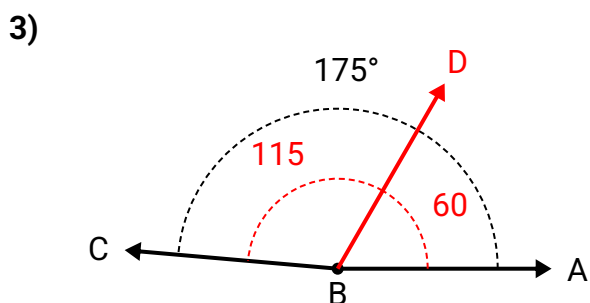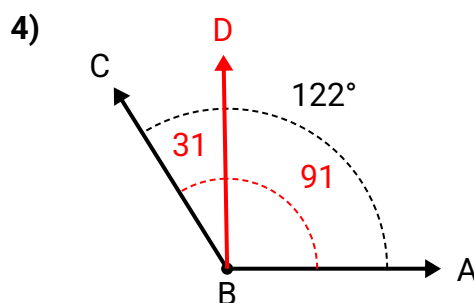B. What is the measure of angle ABD?

1. **37**

2. **83**

3. **115**

4. **91**

5. **62**

6. **60**

3)

175° D
115
60
C B A

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?

4)

C D
122°
31 91
B A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 31 degrees.
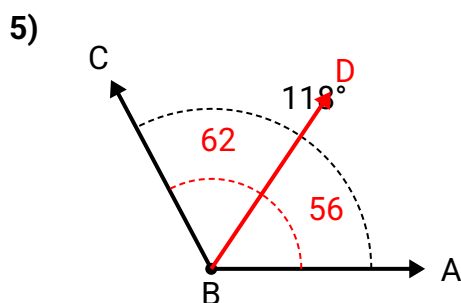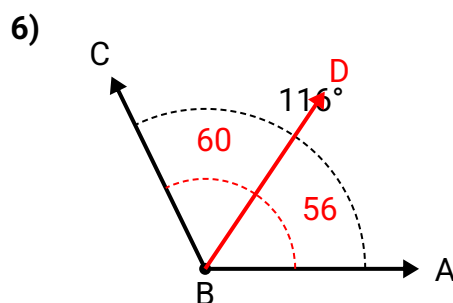B. What is the measure of angle ABD?

5)

C D
118°
62
56
B A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 56 degrees.
B. What is the measure of angle DBC?

6)

C D
116°
60
56
B A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 56 degrees.
B. What is the measure of angle DBC?

Math