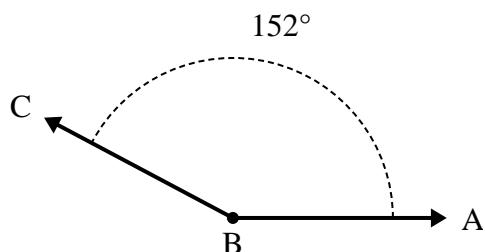# Adding a Ray and Calculating Angle
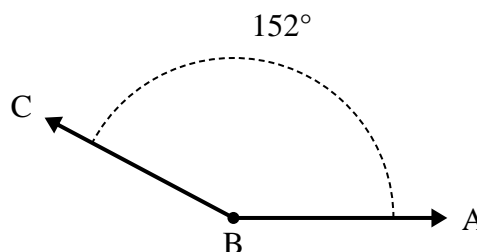
Solve each problem.

1)

152°

C

B ——→ A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 41 degrees.

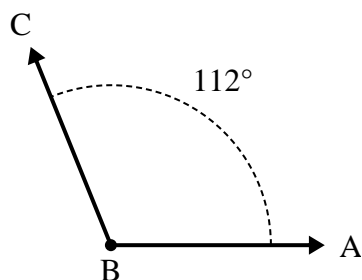B. What is the measure of angle DBC?

2)

152°

C

B ——→ A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 115 degrees.

B. What is the measure of angle DBC?

1. _____

2. _____

3. _____
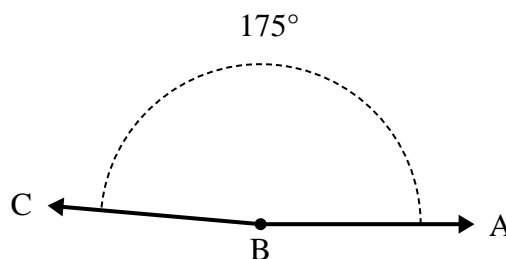
4. _____

5. _____

6. _____

3)

C

112°

B ——→ A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 71 degrees.

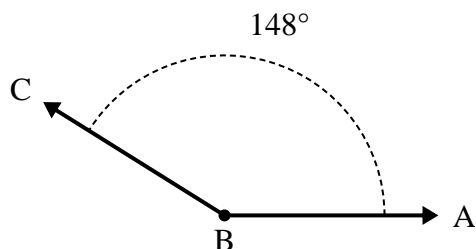B. What is the measure of angle DBC?

4)

175°

C ←—— B ——→ A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 79 degrees.

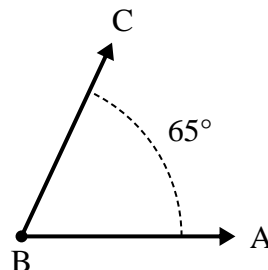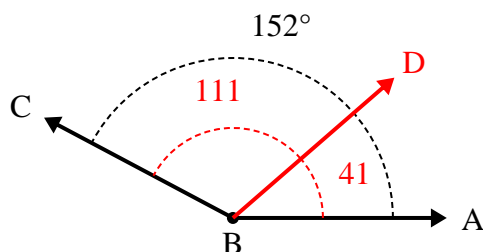B. What is the measure of angle ABD?

5)

148°

C

B ——→ A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 57 degrees.

B. What is the measure of angle ABD?

6)

C

65°

B ——→ A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 34 degrees.

B. What is the measure of angle DBC?

Math

1-6 | 83 | 67 | 50 | 33 | 17 | 0

Name: **Answer Key**
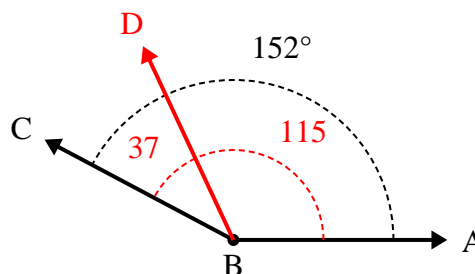
Solve each problem.

1)

152°

D

C

111

41

A

B

A. Draw and label ray BD so that it cuts
angle ABC into two smaller angles, with
angle ABD measuring 41 degrees.

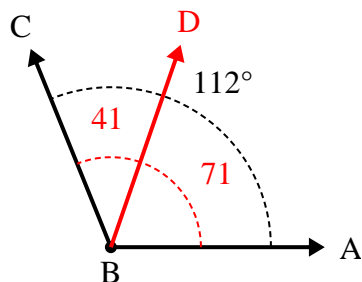B. What is the measure of angle DBC?

2)

D

152°

C

37

115

A

B

A. Draw and label ray BD so that it cuts
angle ABC into two smaller angles, with
angle ABD measuring 115 degrees.

B. What is the measure of angle DBC?

1. **111°**

2. **37°**

3. **41°**

4. **96°**
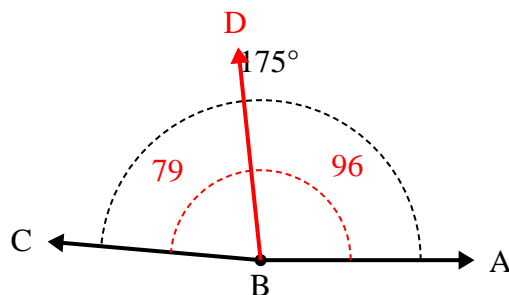
5. **91°**

6. **31°**

3)

C

D

112°

41

71

A

B

A. Draw and label ray BD so that it cuts
angle ABC into two smaller angles, with
angle ABD measuring 71 degrees.

B. What is the measure of angle DBC?

4)

D

175°

79

96

C

A
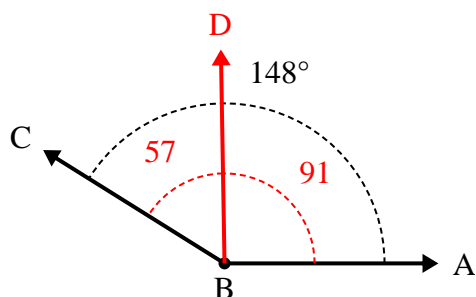
B

A. Draw and label ray BD so that it cuts
angle ABC into two smaller angles, with
angle DBC measuring 79 degrees.

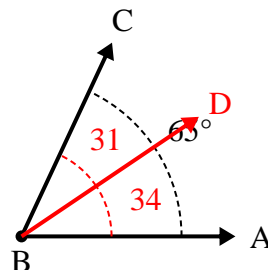B. What is the measure of angle ABD?

5)

D

148°

C

57

91

A

B

A. Draw and label ray BD so that it cuts
angle ABC into two smaller angles, with
angle DBC measuring 57 degrees.

B. What is the measure of angle ABD?

6)

C

D

65°

31

34

A

B

A. Draw and label ray BD so that it cuts
angle ABC into two smaller angles, with
angle ABD measuring 34 degrees.

B. What is the measure of angle DBC?

Math