Solve each problem.

1)

171°
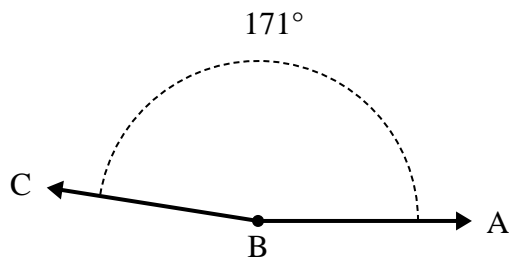
C ← B → A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 117 degrees.

B. What is the measure of angle DBC?

2)

C
122°

B → A
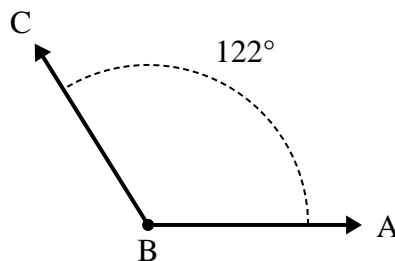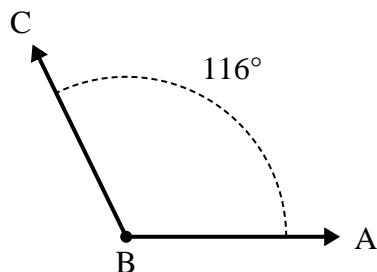
A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 68 degrees.

B. What is the measure of angle DBC?

3)

C
116°

B → A

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

B. What is the measure of angle ABD?

4)

C
117°

B → A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 56 degrees.

B. What is the measure of angle ABD?

5)

166°

C ← B → A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 96 degrees.

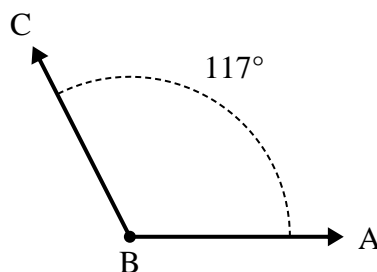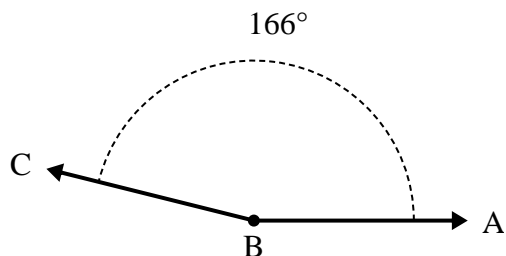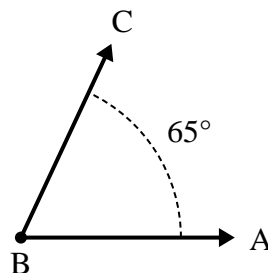B. What is the measure of angle DBC?

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

Name: **Answer Key**

Solve each problem.

Answers

1)

D
171°
117
54
C
B
A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 117 degrees.

B. What is the measure of angle DBC?

2)

C
D
122°
54
68
B
A

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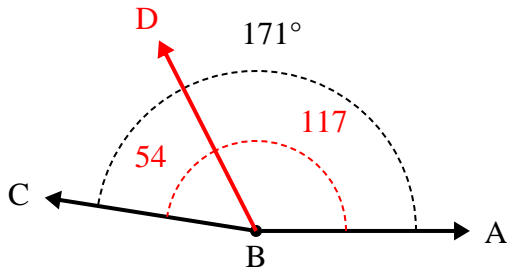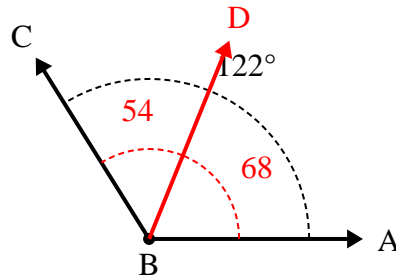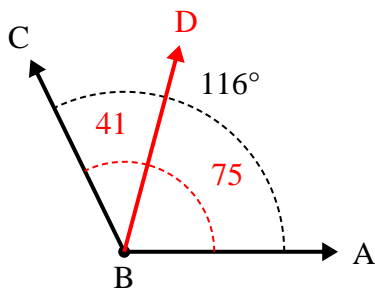
B. What is the measure of angle DBC?

1. **54°**

2. **54°**

3. **75°**
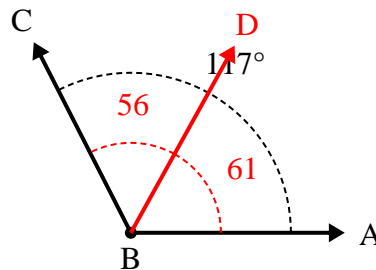
4. **61°**

5. **70°**

6. **31°**

3)

C
D
116°
41
75
B
A

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

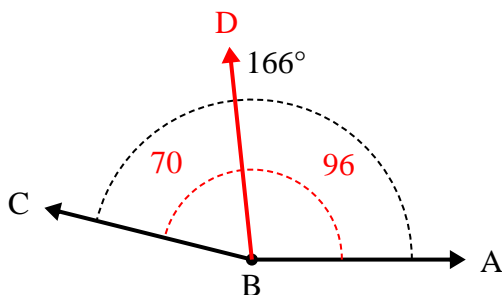B. What is the measure of angle ABD?

4)

C
D
117°
56
61
B
A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 56 degrees.

B. What is the measure of angle ABD?

5)

D
166°
70
96
C
B
A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 96 degrees.

B. What is the measure of angle DBC?

6)

C
D
31
65°
34
B
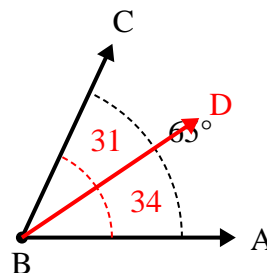A

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?

83	67	50	33	17	0

Math