Solve each problem.

1)

134°
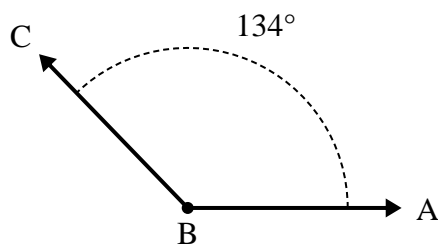
C

B   A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 50 degrees.

B. What is the measure of angle DBC?

2)

C

97°

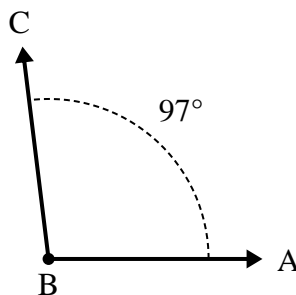B   A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 66 degrees.
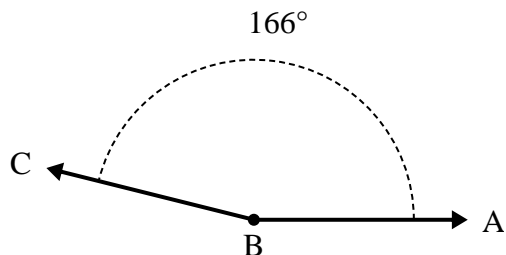
B. What is the measure of angle DBC?

3)

166°

C

B   A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 52 degrees.

B. What is the measure of angle ABD?

4)

161°

C

B   A
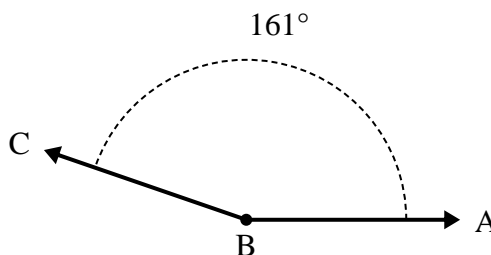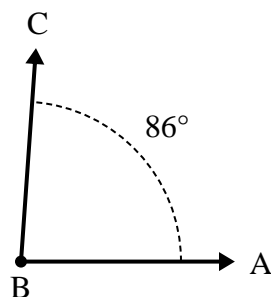
A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 99 degrees.

B. What is the measure of angle ABD?

5)

C

86°

B   A
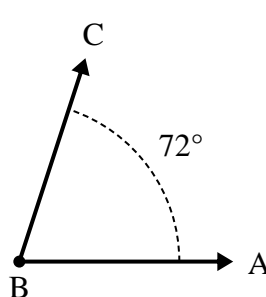
A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 33 degrees.

B. What is the measure of angle ABD?
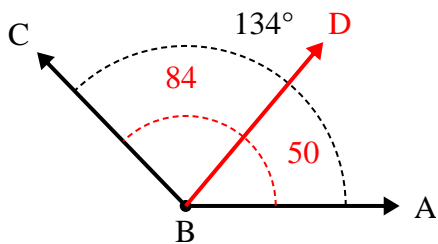
6)

C

72°

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?

Name:

Solve each problem.

1)

134° D
C
84
50
B → A

1. **84°**

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 50 degrees.

B. What is the measure of angle DBC?
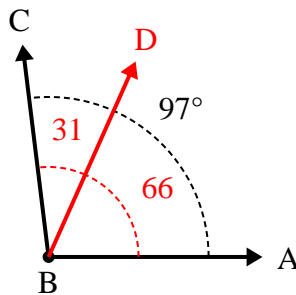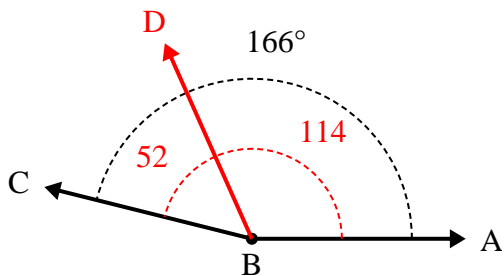
2)

C
D
31   97°
66
B → A

2. **31°**

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 66 degrees.
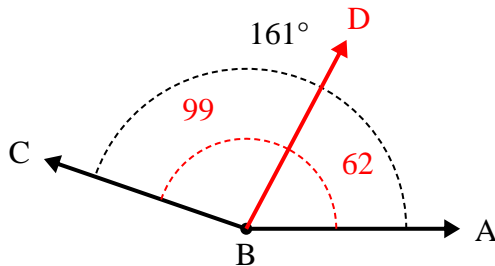
B. What is the measure of angle DBC?

3. **114°**

4. **62°**

5. **53°**

6. **41°**

3)

D
166°
52   114
C
B → A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 52 degrees.

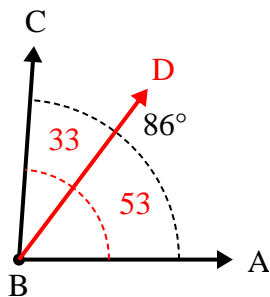B. What is the measure of angle ABD?

4)

161°   D
99
C
62
B → A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 99 degrees.

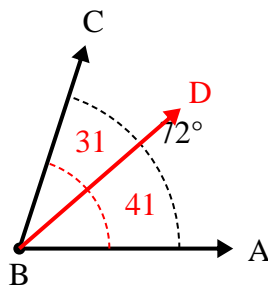B. What is the measure of angle ABD?

5)

C
D
33   86°
53
B → A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 33 degrees.

B. What is the measure of angle ABD?

6)

C
D
31   72°
41
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?