Adding a Ray and Calculating Angle

Name: _____

Solve each problem.

1)

C

84°

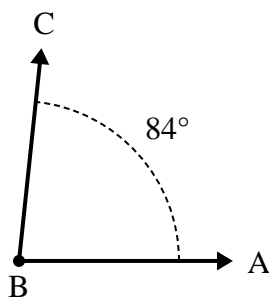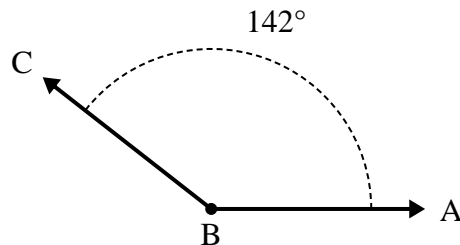B → A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 38 degrees.

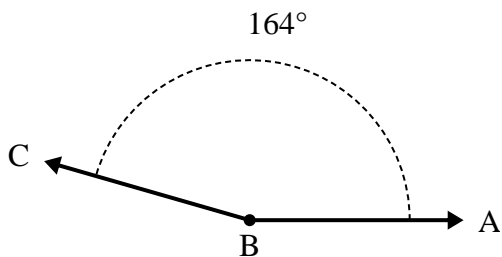B. What is the measure of angle DBC?

2)

142°

C

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)

164°

C

B → A
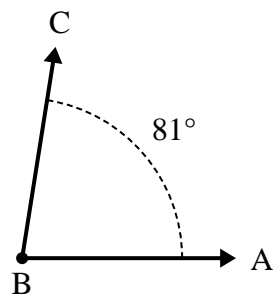
A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 119 degrees.

B. What is the measure of angle ABD?

4)

C

81°

B → A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 42 degrees.

B. What is the measure of angle DBC?

5)

176°

C ← B → A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 115 degrees.
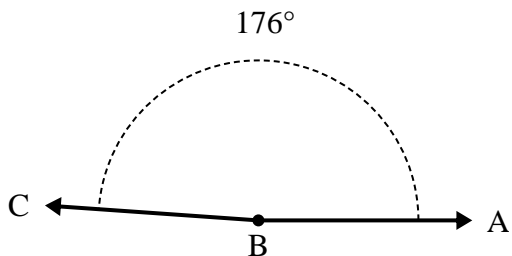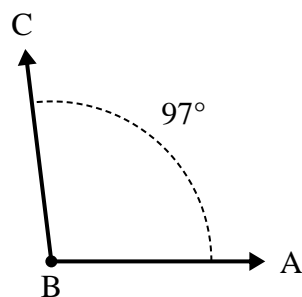
B. What is the measure of angle ABD?

6)

C

97°

B → A

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 39 degrees.

B. What is the measure of angle DBC?

Math

Solve each problem.

1)

C

84° D

46

38

A

B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 38 degrees.

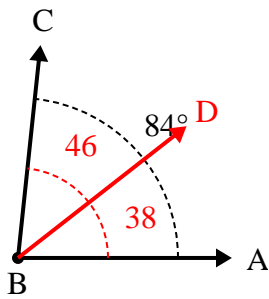B. What is the measure of angle DBC?

2)

D

142°

C

76

66

A
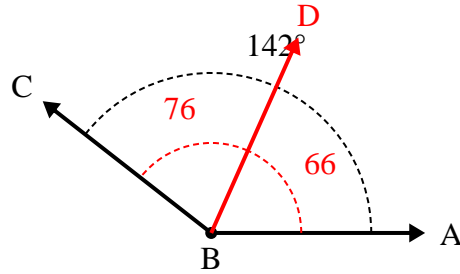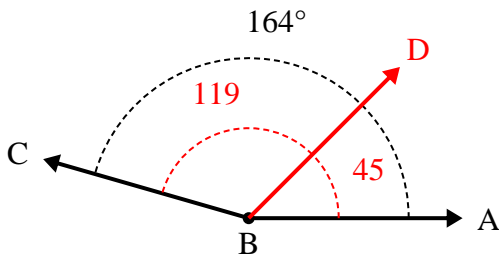
B

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?

1.   **46°**

2.   **76°**

3.   **45°**

4.   **39°**

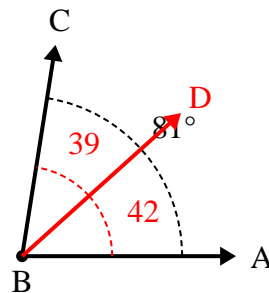5.   **61°**

6.   **58°**

3)

164°

D

119

C

45

A

B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 119 degrees.

B. What is the measure of angle ABD?

4)

C

D

81°

39

42

A

B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 42 degrees.

B. What is the measure of angle DBC?

5)

176° D

115

61

C

A

B

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

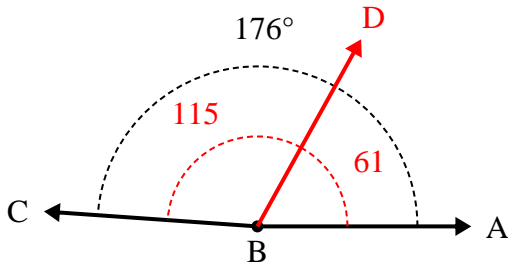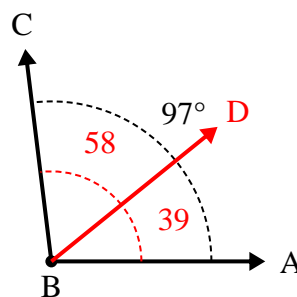B. What is the measure of angle ABD?

6)

C

97° D

58

39

A

B

A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 39 degrees.

B. What is the measure of angle DBC?

Math