

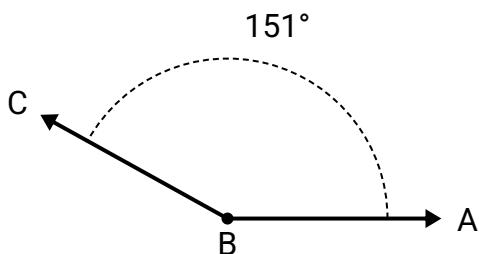


## Adding a Ray and Calculating Angle

Name: \_\_\_\_\_

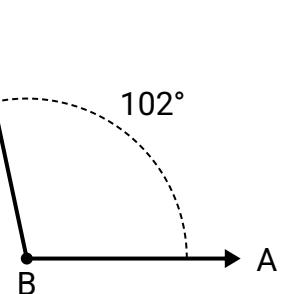
Solve each problem.

1)



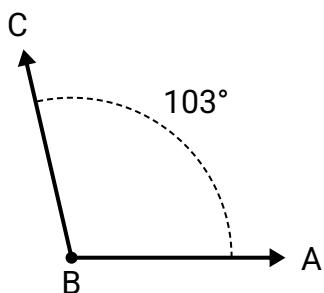
A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 120 degrees.  
B. What is the measure of angle DBC?

2)



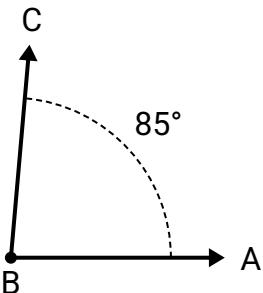
A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 71 degrees.  
B. What is the measure of angle ABD?

3)



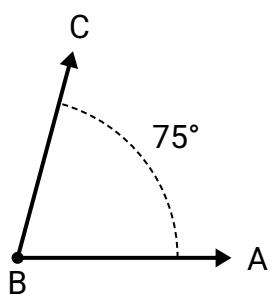
A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 43 degrees.  
B. What is the measure of angle DBC?

4)



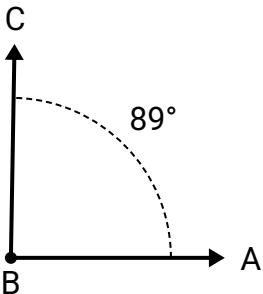
A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 38 degrees.  
B. What is the measure of angle DBC?

5)



A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 32 degrees.  
B. What is the measure of angle DBC?

6)



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?

## Answers

1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_  
4. \_\_\_\_\_  
5. \_\_\_\_\_  
6. \_\_\_\_\_

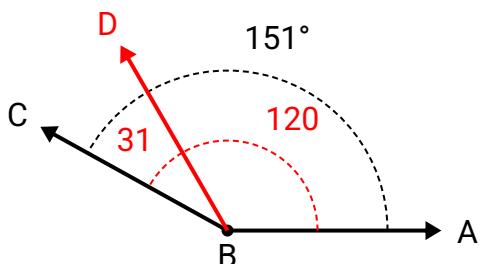


## Adding a Ray and Calculating Angle

Name: **Answer Key**

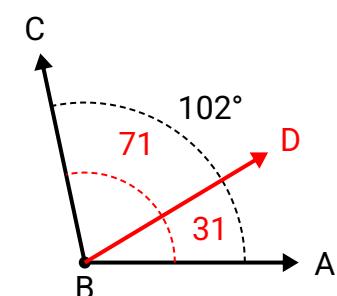
Solve each problem.

1)



A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 120 degrees.  
 B. What is the measure of angle DBC?

2)



A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 71 degrees.  
 B. What is the measure of angle ABD?

**Answers**

1. **31°**

2. **31°**

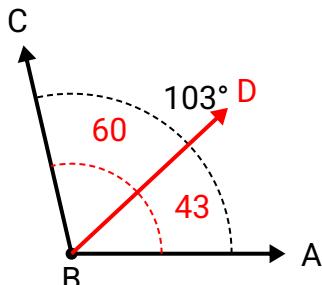
3. **60°**

4. **47°**

5. **43°**

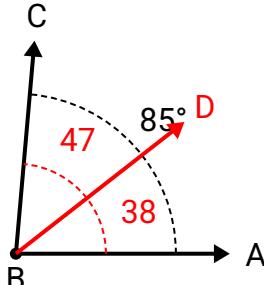
6. **48°**

3)



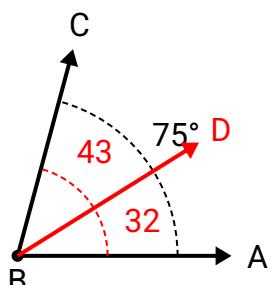
A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 43 degrees.  
 B. What is the measure of angle DBC?

4)



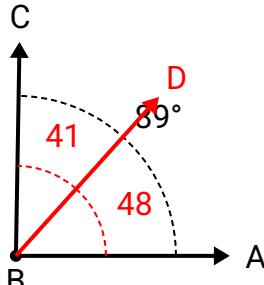
A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle ABD measuring 38 degrees.  
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A. Draw and label ray BD so that it cuts angle ABC into two smaller angles, with angle DBC measuring 41 degrees.  
 B. What is the measure of angle ABD?