



Name: _____

Date: _____

Angle Bisector Theorem

Solve for x. Show your work.

1. In triangle ABC, $AB = 12$, $AC = 12$.
Angle bisector from A creates $BD = 4$. Find DC.
2. In triangle ABC, $AB = 11$, $AC = 11$.
Angle bisector from A creates $BD = 6$. Find DC.
3. In triangle ABC, $AB = 6$, $AC = 13$.
Angle bisector from A creates $BD = 3$. Find DC.
4. In triangle ABC, $AB = 6$, $AC = 8$.
Angle bisector from A creates $BD = 5$. Find DC.
5. In triangle ABC, $AB = 7$, $AC = 11$.
Angle bisector from A creates $BD = 4$. Find DC.
6. In triangle ABC, $AB = 7$, $AC = 11$.
Angle bisector from A creates $BD = 3$. Find DC.
7. In triangle ABC, $AB = 9$, $AC = 14$.
Angle bisector from A creates $BD = 3$. Find DC.
8. In triangle ABC, $AB = 7$, $AC = 14$.
Angle bisector from A creates $BD = 6$. Find DC.



Angle Bisector Theorem – Answer Key

1. In triangle ABC, $AB = 12$, $AC = 12$.
Angle bisector from A creates $BD =$
4. Find DC.

4.00

2. In triangle ABC, $AB = 11$, $AC = 11$.
Angle bisector from A creates $BD =$
6. Find DC.

6.00

3. In triangle ABC, $AB = 6$, $AC = 13$.
Angle bisector from A creates $BD =$
3. Find DC.

6.50

4. In triangle ABC, $AB = 6$, $AC = 8$.
Angle bisector from A creates $BD =$
5. Find DC.

6.67

5. In triangle ABC, $AB = 7$, $AC = 11$.
Angle bisector from A creates $BD =$
4. Find DC.

6.29

6. In triangle ABC, $AB = 7$, $AC = 11$.
Angle bisector from A creates $BD =$
3. Find DC.

4.71

7. In triangle ABC, $AB = 9$, $AC = 14$.
Angle bisector from A creates $BD =$
3. Find DC.

4.67

8. In triangle ABC, $AB = 7$, $AC = 14$.
Angle bisector from A creates $BD =$
6. Find DC.

12.00