



Finding Angle between Two Points

Name: _____

Calculate the angle of the circle relative to (0,0).

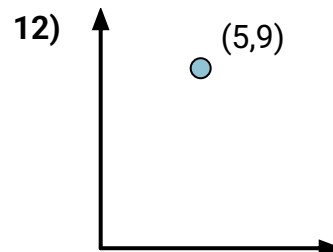
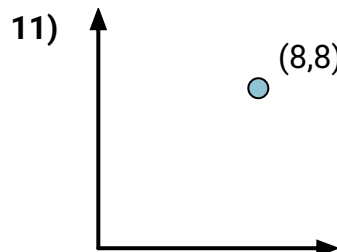
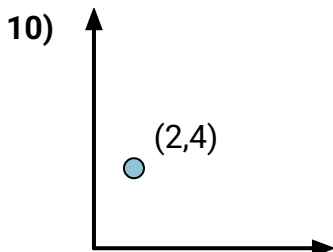
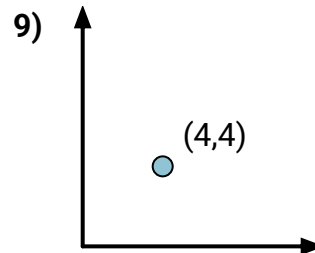
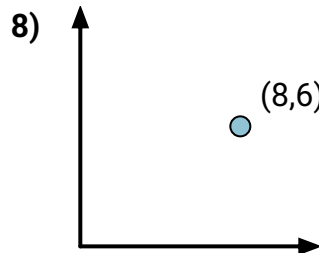
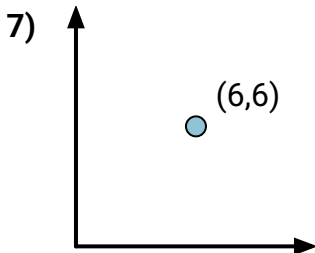
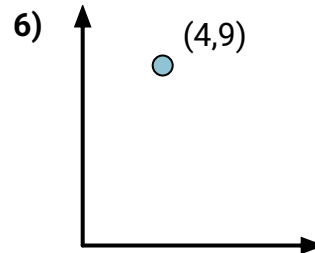
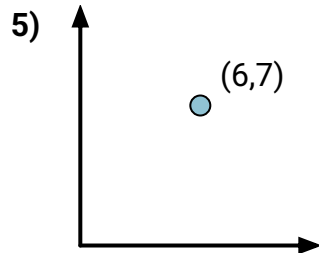
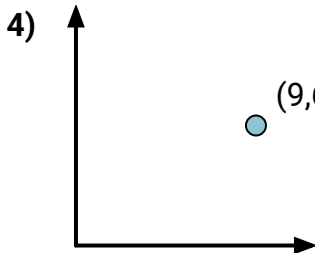
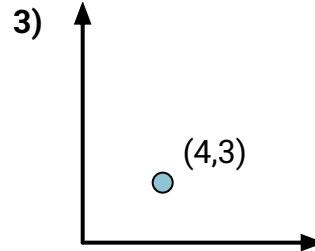
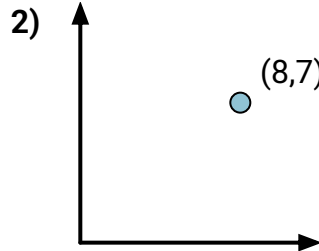
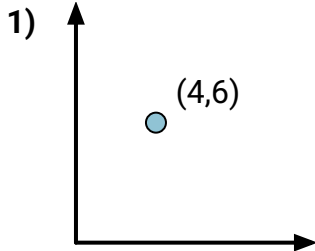
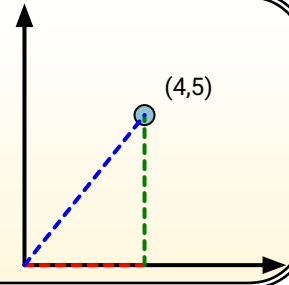
First find the slope.

$$(y_2 - y_1) \div (x_2 - x_1) = m$$

$$(5 - 0) \div (4 - 0) = 1.25$$

Then find the arc tangent (aka. inverse tangent) of the slope.

$$\arctan(1.25) = 51.34^\circ$$



Answers

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____



Finding Angle between Two Points

Name: **Answer Key**

Calculate the angle of the circle relative to (0,0).

First find the slope.

$$(y_2 - y_1) \div (x_2 - x_1) = m$$

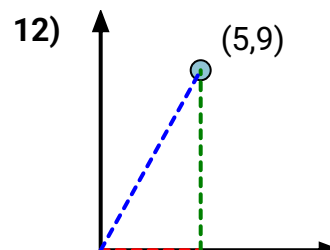
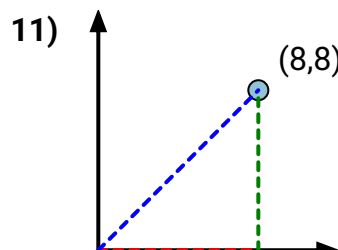
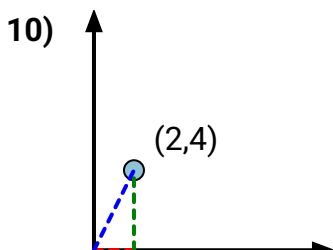
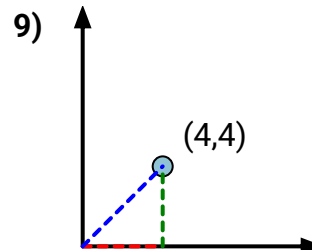
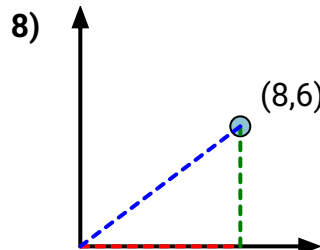
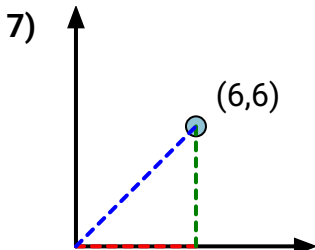
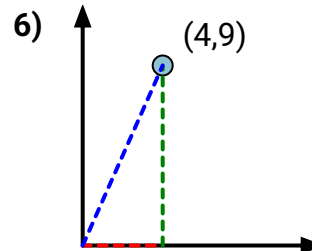
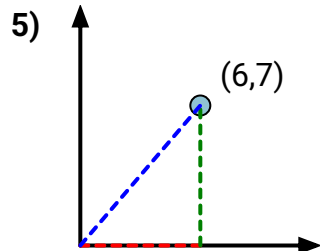
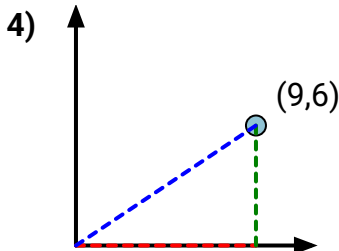
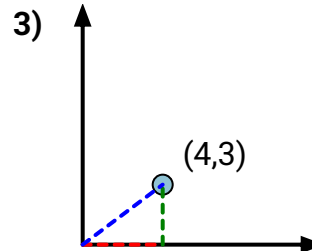
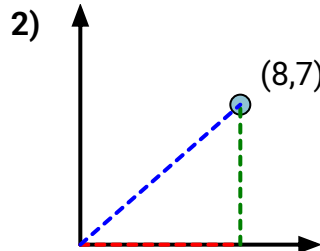
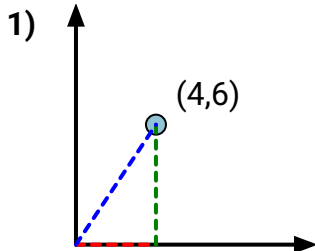
$$(5 - 0) \div (4 - 0) = 1.25$$

Then find the arc tangent (aka. inverse tangent) of the slope.

$$\arctan(1.25) = 51.34^\circ$$

(4,5)

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Answers

1. **56.31**

2. **41.19**

3. **36.87**

4. **33.69**

5. **49.40**

6. **66.04**

7. **45.00**

8. **36.87**

9. **45.00**

10. **63.43**

11. **45.00**

12. **60.95**