

# Finding Angle between Two Points

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

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

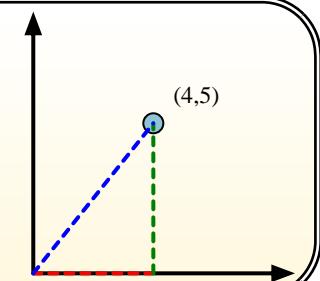
First find the slope.

$$(y_2 - y_1) / (x_2 - x_1) = m$$

$$(5 - 0) / (4 - 0) = 1.25$$

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

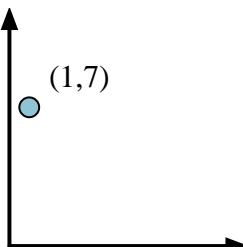
$$\arctan(1.25) = 51.34^\circ$$



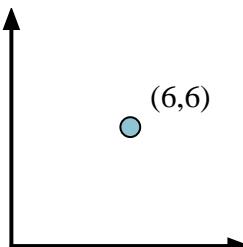
## Answers

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

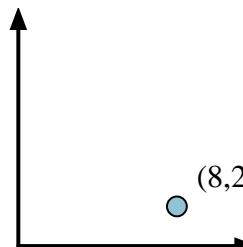
1) (1, 7)



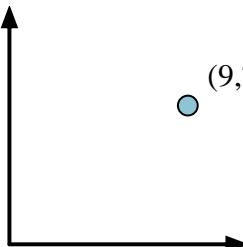
2) (6, 6)



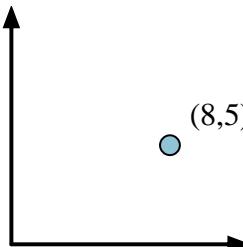
3) (8, 2)



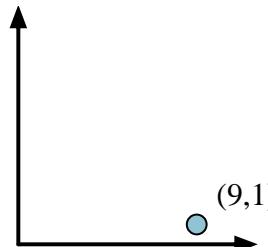
4) (9, 7)



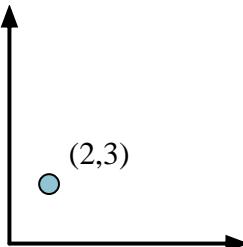
5) (8, 5)



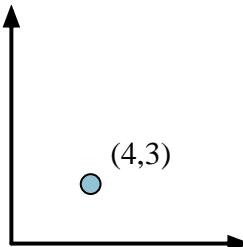
6) (9, 1)



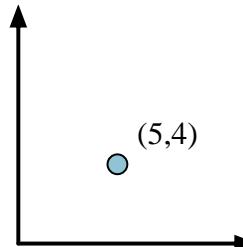
7) (2, 3)



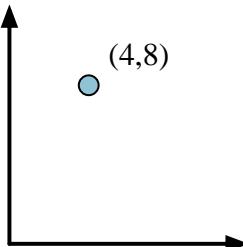
8) (4, 3)



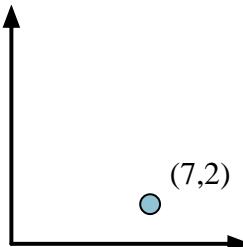
9) (5, 4)



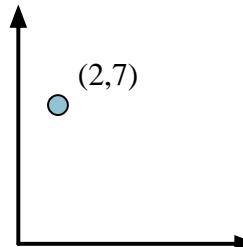
10) (4, 8)



11) (7, 2)



12) (2, 7)





# Finding Angle between Two Points

Name: **Answer Key**

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

First find the slope.  
 $(y_2 - y_1) / (x_2 - x_1) = m$   
 $(5 - 0) / (4 - 0) = 1.25$

Then find the arc tangent (aka. inverse tangent) of the slope.  
 $\arctan(1.25) = 51.34^\circ$

## Answers

1. **81.87**
2. **45.00**
3. **14.04**
4. **37.87**
5. **32.01**
6. **6.34**
7. **56.31**
8. **36.87**
9. **38.66**
10. **63.43**
11. **15.95**
12. **74.05**

