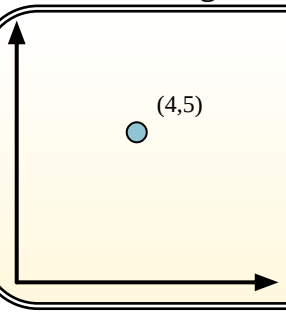
**Calculate the angle of the circle relative to (0,0).**



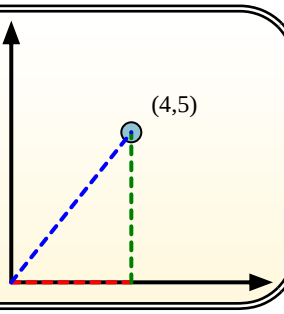

First find the slope.

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

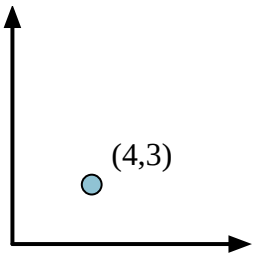
$(5-0)\div(4-0) =$ **1.25**

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

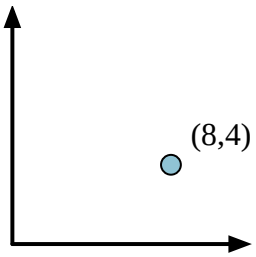
arctan(1.25) = **51.34°**



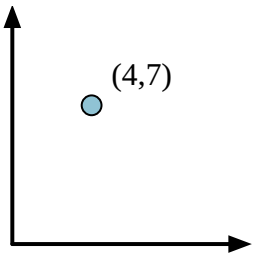

**1)**



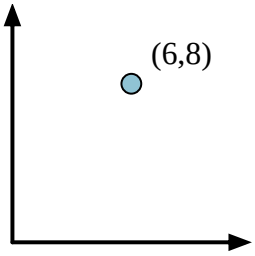

**2)**



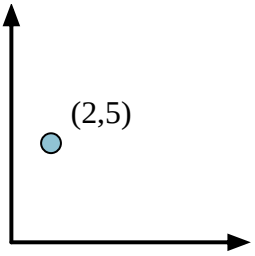

**3)**



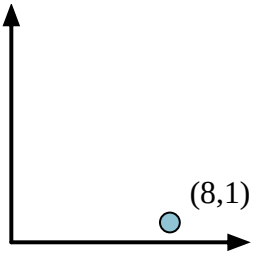

**4)**



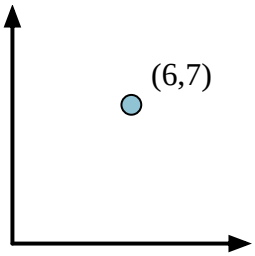

**5)**



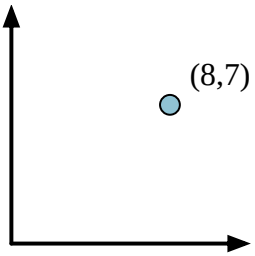

**6)**



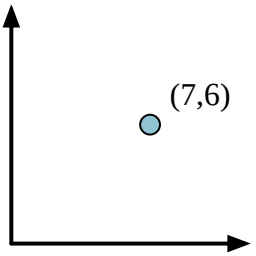

**7)**



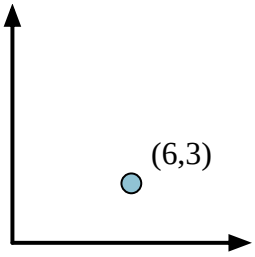

**8)**



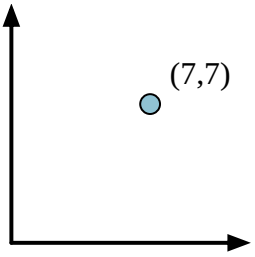

**9)**



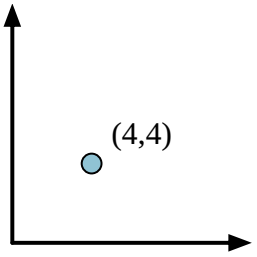

**10)**




**11)**




**12)**




## Answers

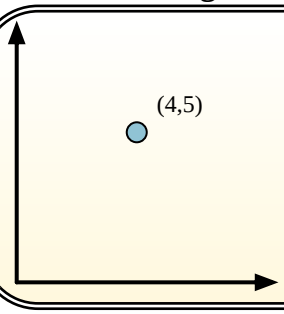
1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____
11. _____
12. _____



| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1-10 | 92 | 83 | 75 | 67 | 58 | 50 | 42 | 33 | 25 | 17 |
| 11-12 | 8 | 0 | | | | | | | | |

Finding Angle between Two Points  Name: **Answer Key**

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




First find the slope.

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

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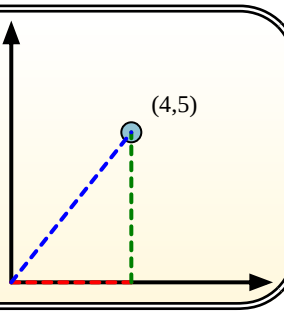
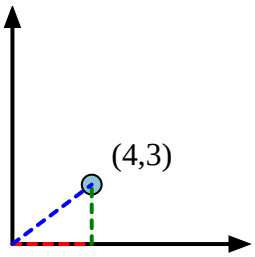
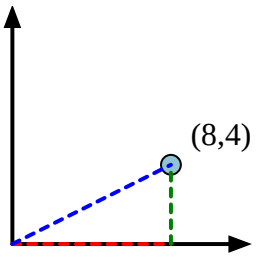
$\arctan(1.25) =$ **51.34°**



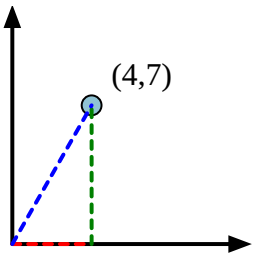

**1)**



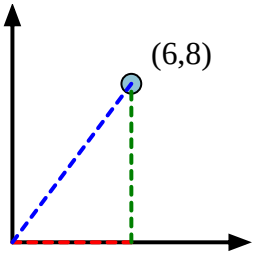

**2)**



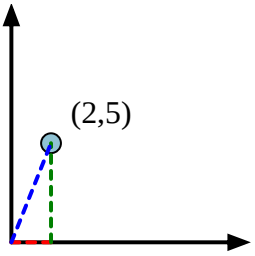

**3)**



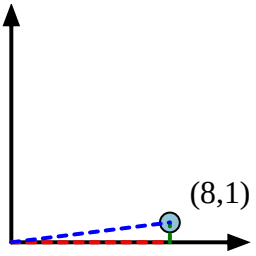

**4)**



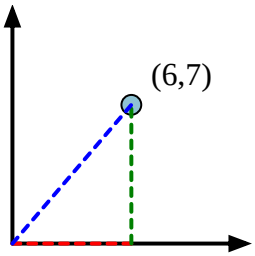

**5)**



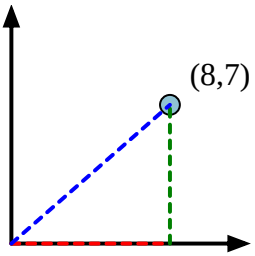

**6)**



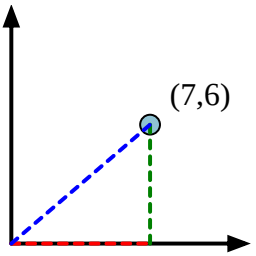

**7)**



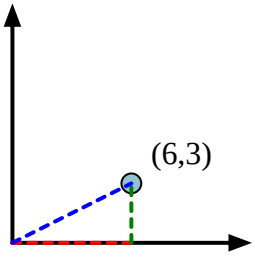

**8)**



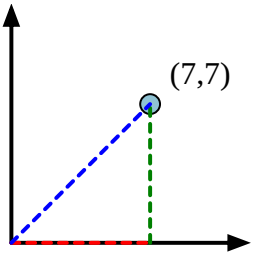

**9)**



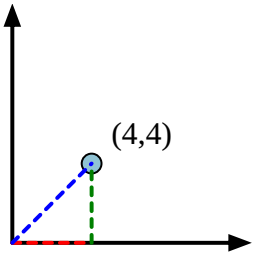

**10)**




**11)**




**12)**




**Answers**

1. **36.87**
2. **26.57**
3. **60.26**
4. **53.13**
5. **68.20**
6. **7.13**
7. **49.40**
8. **41.19**
9. **40.60**
10. **26.57**
11. **45.00**
12. **45.00**



| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 1-10 | 92 | 83 | 75 | 67 | 58 | 50 | 42 | 33 | 25 | 17 |
| 11-12 | 8 | 0 | | | | | | | | |