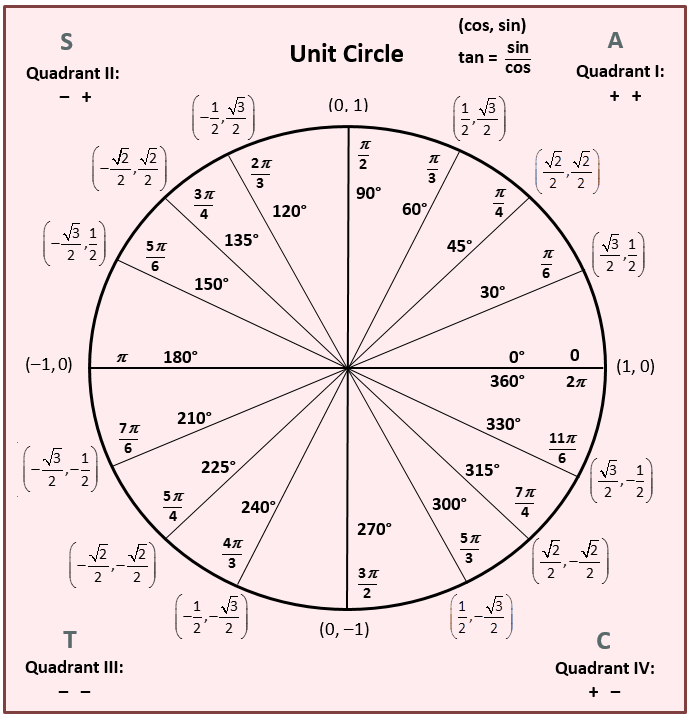
CCSS Algebra 4 Tangent on the Unit Circle

Recall that in a right triangle, .

1. Explain why, if is a rotation on the unit circle, . Be specific.



1. Use the unit circle to find:
2. Use the unit circle to solve each equation for :

1. Fill in the following table. Use your answers to draw a graph of sine, cosine, and tangent.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | 0 | 30 | 45 | 60 | 90 |
|  |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  |  |  |  |

|  |  |
| --- | --- |
| Domain:  Range:  Period: |  |
| Domain:  Range:  Period: |  |
| Domain:  Range:  Period: |  |

1. Explain, using the unit circle, why the y-intercept for cosine is (0,1), but the y-intercept for sine AND tangent is (0,0).

1. What Algebra 1/2 concept is equivalent to tangent? Why is the period for tangent DIFFERENT?