

Name:

## QUIZ - MATH GRADE 10

1. (60%) Find

a. (6%)  $\text{Arctan}(1) =$

b. (6%)  $\text{Arccos}\left(-\frac{1}{\sqrt{2}}\right) =$

c. (6%)  $\text{Arcsin}\left(\sin\left(\frac{3}{2}\right)\right) =$

d. (6%)  $\text{Arcsin}\left(-\frac{\sqrt{3}}{2}\right) =$

e. (6%)  $\text{Arc tan}(-\tan(1))) =$

f. (6%)  $\text{Sin}(\arcsin(0.11))) =$

g. (6%)  $\text{Arctan}\left(-\frac{1}{\sqrt{3}}\right) =$

h. (6%)  $\text{Sin}(-\text{Arc cos}(0)) =$

i. (6%)  $\text{ArcCos}\left(\frac{\arcsin(-1)}{\pi}\right) =$

j. (6%)  $\text{Arctan}(-7^{100}) \approx$

2. (15%) Given that  $\sin(x) = -\frac{2}{9}$  and that  $\tan(x) < 0$

a. (5%) The angle x is in the \_\_\_\_\_ Quadrant.

b. (10%)  $\cos(x) =$

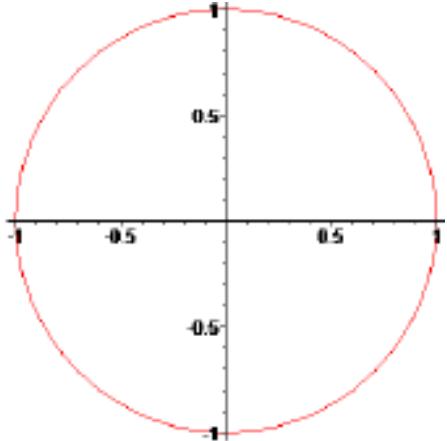
3. (25%) Given that  $\sin(70^\circ) = k$ , find in terms of k:

a. (7%)  $\cos(20^\circ) =$

b. (6%)  $\cos(110^\circ) =$

c. (6%)  $\sin(160^\circ) =$

d. (6%)  $\sin(-20^\circ) =$



**BONUS (10%)**

Find the domain of the function  $f(x) = \sqrt{(\ln(x-1))^2 - 2}$