Review Trigonometric Functions Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Use <https://www.geogebra.org/m/nv9vex3X> to fill in the following Table with deci,als:

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| x degrees | 0 | 45 | 90 | 135 | 180 | 210 | 240 | 315 | 360 | 405 |
| cos(x) |  |  |  |  |  |  |  |  |  |  |
| sin(x) |  |  |  |  |  |  |  |  |  |  |
| tan(x) |  |  |  |  |  |  |  |  |  |  |

1. Use the above table to plot *y= cos(x)* and *y = sin(x)* in the grids below

|  |  |  |
| --- | --- | --- |
|  |  | Image result for xy grid degrees |
| *y = cos(x)* | *y = sin(x)* | *y = tan(x)* |

1. Draw unit-circle diagrams to visualize and write down relationships between the following

|  |  |  |
| --- | --- | --- |
| sin(x), sin(180-x) | cos(x), cos(180-x) | tan(x), tan(180+x) |
| Unit circle diagram |  |  |
| Relationships |  |  |

|  |  |  |
| --- | --- | --- |
| sin(x), sin(-x) | cos(x), cos(-x) | cos(x), cos(180+x) |
|  |  |  |
|  |  |  |

1. Fill in the following table associated with the unit circle to convert angle measure in degrees to angle measure in readians:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Angle measure in Degrees | 180 | 90  | 270 | 60 | 30 | 45 | 10 | 20 | 360 |
| Associated Fraction of Circumference |  |  |  |  |  |  |  |  |  |
| Associated Length of Arc on U.C. in m. |  |  |  |  |  |  |  |  |  |
| Angle measure in radians |  |  |  |  |  |  |  |  |  |

1. Use <https://www.geogebra.org/m/nv9vex3X> to fill in the following Table with decimals:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| x radians | 0 | $$\frac{π}{2}$$ | $$\frac{3π}{4}$$ | $$π$$ | $$\frac{5π}{4}$$ | $$\frac{3π}{2}$$ | $$\frac{7π}{4}$$ | $$2π$$ |
| cos(x) |  |  |  |  |  |  |  |  |
| sin(x) |  |  |  |  |  |  |  |  |
| tan(x) |  |  |  |  |  |  |  |  |

1. Use the above table to plot *y= cos(x), y = sin(x)* and *y = tan(x)* below

|  |  |  |
| --- | --- | --- |
| C:\Users\mcgeed4\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\B5C76110.tmp *y = cos(x)* | C:\Users\mcgeed4\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\B5C76110.tmp *y = sin(x)* | C:\Users\mcgeed4\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\B5C76110.tmp *y = tan(x)* |

1. Optional: Draw an appropriate diagram and explain why sin(90-x) = cos(x) and cos(90-x) = sin(x)