$\qquad$ Section $\qquad$ Date $\qquad$
In this homework assignment, you must find all solutions to each given question. You will use the formula for the circle: $u^{2}+v^{2}=r^{2}$. Because this is a unit circle, $r=1$. So the formula becomes: $u^{2}+v^{2}=1$. Don't forget to chose both + and -answers whenever possible.


Each box has a size of 0.1 by 0.1 unit. The center of this graph is the point $(0,0)$.

Put a visible dot at the center point.
Then, work the problems below. Give as many correct answers as you can to each problem. As you work each problem, show the points ( $u, v$ ) on the graph, and label them with the letter of the problem.

Answers should be given in radical form. Don't use a calculator.

Finally, draw carefully (using a compass if you have one) a circle tangent to the top, bottom, left, and right of the graph to the left. The circle should have a radius of 1 unit.

All of your answer points should be on this circle.

|  | PROBLEM | WORK | ANSWER |
| :--- | :--- | :--- | :--- |
| A | If $u=1$, find $v$. |  |  |
| B | If $u=3 / 5$, find $v$. |  |  |
| C | If $u=(-4 / 5)$ find $v$. |  |  |
| D | If $u=0$, find $v$. |  |  |
| E | If $u=-1$, find $v$. |  |  |
| F | If $u=1.5$, find $v$. |  |  |
| G | If $v=0.8$, find $u$. |  |  |
| H | If $u=-0.1$, find $v$. |  |  |
| I | I If $v=-1$, find $u$. |  |  |
| K | If $v=-0.3$, find $u$. |  |  |
| L | If $v=-(v 2) / 2$, find $u$. |  |  |
| M | If $v=0.5$, find $u$. |  |  |
| N | If $v=0.5(v 3)$, find $u$. |  |  |

