

AP CALCULUS AB – SLOPE FIELDS

1) Calculate the slope field for

$$\frac{dy}{dx} = -\frac{4x}{9y}$$

on $x \in [0, 3]$ with $\Delta x = 0.5$ and $y \in [0, 3]$ with $\Delta y = 0.5$, *i.e.*, fill in the table with the slope values rounded to three digits after the decimal. Typing in and running this little program will make your life easier:

```
PROGRAM: SLOPE
: Prompt X
: Prompt Y
: -4*X/9/Y→S
: Disp S
: ■
```

```
PrgrmSLOPE
X=?0.5
Y=?3
-.0740740741
Done
```

	0.0	0.5	1.0	1.5	2.0	2.5	3.0	x
3.0								
2.5								
2.0								
1.5								
1.0								
0.5								
0.0								
y								

2) Graph the slopes from the table on the grid.

