Math 229 Quiz 1a

You may use only Julia during this exam. No calculators, etc.

NAME: Solutions

Problem 1.
Convert the following Julia expressions to standard mathematical expressions.

a. `a+b/c/d+e`

$$a + \frac{b}{cd} + e$$

b. `1/2x*cos(x)^2`

$$\frac{\cos^2 x}{2x}$$

c. `-4.1e-12`

$$-4.1 \times 10^{-12}$$

Problem 2.
Convert each of the following expressions to its Julia equivalent:

a. $\sin^2(3\pi/2x)$.

```
sin(3*pi/(2*x))^2
```

b. $\dfrac{x + \sqrt{x}}{\frac{x}{y} - 2}$

```
(x+sqrt(x))/((x/y)-2)
```

Math 229 Quiz 1b

You may use only Julia during this exam. No calculators, etc.

NAME: Solutions

Problem 1.
Convert the following Julia expressions to standard mathematical expressions.

a. `a-b/c/d-e`

$a - \frac{b}{cd} - e$

b. `1/3x*sin(x)^2`

$\frac{\sin^2 x}{3x}$

c. `-1.4e-11`

-1.4×10^{-11}

Problem 2.
Convert each of the following expressions to its Julia equivalent:

a. $\cos^2(2\pi/3x)$.

`cos(2*π/(3*x))^2`

b. $\dfrac{\sqrt{x}+x}{2-\frac{x}{y}}$

`(sqrt(x)+x)/(2-(x/y))`