

NAME:

MATH1210-002

### Quiz 0 (Review)

June 13, 2016

**Instructions:** Please show all of your work as partial credit will be given where appropriate, *and* there may be no credit given for problems where there is no work shown. All answers should be boxed and completely simplified, unless otherwise stated. No electronics are allowed. (*Note: This quiz is on both sides of the paper.*)

1. **[5 points]** Find the equation of the line that goes through the point  $(4, -2)$  and is perpendicular to the line  $3xy = 5$ .

2. **[5 points]** If  $f(x) = x^2 + x - 1$ , find  $\frac{f(x+h)-f(x)}{h}$ .

3. **[4 points]** Solve this system of equations:

$$2x^2 - y = -7$$

$$3x + y = 12$$

4. **[1 point each]** Find the *exact* value of each of these expressions (without a calculator).

(a)  $\tan(5\pi/6) =$

(b)  $\arcsin(-1/2) =$

(c)  $\arccos(\cos(120^\circ)) =$

(d)  $\tan(\arctan(11/4)) =$

(e)  $\arccos(-1/2) =$

(f)  $\arcsin(\sin(5\pi/4)) =$