

Math 120 (Quiz 1, Sept. 28)

Name:

Instructions: You have 20 minutes for this quiz.

1. Factor :

$$x^3 + 4x^2 + 3x$$

2. Solve:

$$3 - 5x < 7$$

3. Expand:

$$7(x - 1)(x + 3)$$

4. Simplify: $\frac{\pi}{2} + \frac{\sqrt{3}}{2} - \frac{1}{4} \frac{\sqrt{8}}{2}$

5. Solve using the quadratic formula:

$$2x^2 = 3x + 4$$

6. Solve the system of equations:

$$3x + y = 7$$

$$2x + 2y = 3$$

7. Evaluate for $x = -3$:

$$x^2 + 4x - 7$$

8. Distribute the $1/3$ through the numerator and denominator:

$$\frac{4x+1}{2x-3} \times \frac{1}{3}$$