

Name: _____

This quiz will not count towards your grade. The purpose of this quiz is to let me get to know you better. For this quiz, you will not need a calculator. Do not use one.

1. Find the zeros of $3x^3 - 12x = 0$.

2. Simplify:

(a) $\frac{a^3b^{-1}c^2}{a^{-2}\sqrt{b^4d}}$

(b) $\sqrt{4x^2 + 4a^2}$

(c) $\frac{2(x+2)^3 - 6(x+2)^2}{((x+2)^3)^2}$

OVER

3. Solve for x :

(a) $\frac{3x + 5}{x + 2} = 7$

(b) i. $|x - 2| = 1$

ii. $|x - 2| = -1$

(c) $(x + 1)(x - 5)(6 - x) > 0$

4. *The rest of this quiz includes some personal questions.*

(a) What are your majors/minors? (If you are undeclared but know what you want, say it.) Why do you want to study those topics?

(b) What other classes are you taking?

- (c) Which math courses have you taken in the past? What were your grades? (*Grades optional, but helpful for me to know where you are coming from.*)
- (d) Where do you have the most difficulty with math?
- (e) What will help you most to succeed in this class?
- (f) What are your hobbies or interests? (*This question is optional.*)
- (g) Have you done calculus before this course?
- (h) Have you heard of “rates of change” before? In what context?
- (i) Can you name a example of mathematics in real life (besides examples we have mentioned in class)?