

Getting to know you Quiz (does not count towards the grade)

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Email to DrZlinear@gmail.com when I tell you to

Subject: pre0

with an attachment: pre0FirstLast.pdf

1.: What are your career goals?

My career goals are to manage a big project such as a new vehicle or

2.: What are your hobbies?

My hobbies are building cars, machining manual or CNC metal, and driving.

3. What is a rational number?

A rational number is a number that does not go on forever, it has an absolute value

4. Prove that the sum of two rational numbers is also a rational number,

$\frac{1}{4} + \frac{1}{2}$  both rational numbers produce  $\frac{3}{4}$  as 2 finite numbers cannot produce a number that doesn't end

5. Prove or disprove (by giving a counterexample): "the sum of two irrational numbers is always also an irrational number"

The sum of two irrational numbers is also always irrational as two numbers that do not have a known end cannot add to rational numbers unless rounded.

6. Prove that there are infinitely many primes.

There are an infinitely many primes as there are an infinite amount of numbers, as the values increase larger, prime numbers also increase

7. Prove that  $\sqrt{5}$  is an irrational number.

5 is a prime number so  $\sqrt{5}$  ~~is~~  
~~is~~  $\sqrt{5} \neq \frac{a}{b}$