

# Quiz 1

Write a regular expression that defines the real numbers in *scientific notation*

Examples include

3.14159

*Pi*

6.02e23

*Avogadro's number*

1.98892e30

*Mass of sun in kg*

700e-9

*Wavelength of red light in meters*

-1

Counterexamples include

.5e.5

$(+|-)?(\text{digit}+)(.\text{digit}+)?(\text{e } (+|-)? \text{digit}+)?$

- Optional sign (2 points)
- Required digits left of “.” (2 points)
- Optional fractional digits (2 points)
- Optional exponential expression with (2 pts)
  - Optional sign on exponent (1 pt)
  - Integral exponents (1 pt)