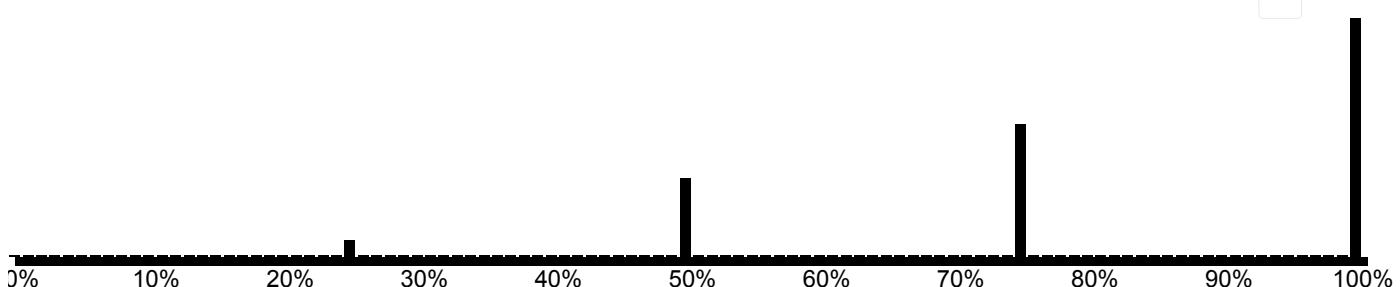


Quiz Summary

Average Score	High Score	Low Score	Standard Deviation	Average Time
82%	100%	25%	0.86	

Section Filter ▾



Question Breakdown

Attempts: 60 out of 60

The equation:

$$ax^2 + bx + c = 0$$

has roots given by the quadratic equation:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \equiv \frac{-b \pm D}{2a}$$

$D < 0$, which of the following is most correct?

The equation has a single solution.	0 %	92% answered correctly
The equation has two real solutions.	3 respondents 5 %	
The equation has two complex solutions.	55 respondents 92 % ✓	
The equation has no solution.	2 respondents 3 %	

Attempts: 60 out of 60

When doing object oriented programming, Python allows one to add variables to objects *after* the objects have been created.

true 51 respondents 85 % ✓	85% answered correctly
false 9 respondents 15 %	

Attempts: 60 out of 60

When performing a numerical differentiation using the formula

$$f'(x) = \lim_{h \rightarrow 0} \frac{f(x + \frac{h}{2}) - f(x - \frac{h}{2})}{h}$$

There is, ε_{app} , caused by ignoring higher order terms in our approximation.

In general, what happens to this error as h gets smaller?

stays the same.	0 %	85% answered correctly
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It gets smaller. 51 respondents 85 %✓

It gets larger. 9 respondents 15 %

Attempts: 60 out of 60

or the formula in the previous problem, there is also a round-off error, ϵ_{ro} , due the finite precision of floating point numbers.

What happens to this error as h gets smaller?

remains the same. 13 respondents 22 %

67% answered correctly

It gets smaller. 7 respondents 12 %

It gets larger. 40 respondents 67 %✓

Report has never been generated.

Report has never been generated.