

ET154 Computer Programming
Introductory Homework Exercises

1. Write the following expressions in Python.

A. $z = -a + b \cdot c$ _____

B. $z = e + \frac{a - b}{c + d}$ _____

C. $z = z^3$ _____

D. $z = y^2 + 4x^3$ _____

E. $z = \text{integer of } x$ _____

2. Determine the legal Python variable names.

Amps	glazzy34	A	r#t	else
salary!6	ohms.load	2b1	print	Third Resistor

3. Evaluate the following expressions where $a=2$ and $b=3$.

A. $x = a+4*b$ $x =$

B. $x = b+a/2-1$ $x =$

C. $x = \text{float}(5+a/b)$ $x =$

D. $x = \text{pow}(a,b-1)/2+1$ $x =$

E. $x = b//a$ $x =$

4. Correct the syntax error(s) in the lines below, if any.

A. # This is my first program

B. Print "This program calculates deviations"

C. $v = \text{float}(\text{input}(\text{Please enter the battery voltage}))$

Answers

1. Write the following expressions in Python.

A. $z = -a + b \cdot c$ $z = -a+b*c$

B. $z = e + \frac{a - b}{c + d}$ $z = e+(a-b)/(c+d)$

C. $z = z^3$ $z = z**3$ or $z = \text{pow}(z,3)$

D. $z = y^2 + 4x^3$ $z = y**2 + 4*pow(x,3)$

E. $z = \text{integer of } x$ $z = \text{int}(x)$

2. Determine the legal Python variable names.

Amps glazzy34 A

3. Evaluate the following expressions where $a=2$ and $b=3$.

A. $x = a+4*b$ $x = 14$

B. $x = b+a/2-1$ $x = 3$

C. $x = \text{float}(5+a/b)$ $x = 5.666\dots$

D. $x = \text{pow}(a,b-1)/2+1$ $x = 3$

E. $x = b//a$ $x = 1$

4. Correct the syntax error(s) in the lines below, if any.

A. `# This is my first program OK`

B. `print("This program calculates deviations")`

C. `v = float(input("Please enter the battery voltage"))`