Ch1

1.1

a=float(input("Please input the value of variable a: "))

b=float(input("Please input the value of variable b: "))

c=float(input("Please input the value of variable c: "))

d=float(input("Please input the value of variable d: "))

print("a value:",a)

print("b value:",b)

print("c value:",c)

print("d value:",d)

z = ((a + b) / (c - d)) \* d

print("((a + b) / (c - d)) \* d = ",z)

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| Please input the value of variable a: 3  Please input the value of variable b: 6  Please input the value of variable c: 9  Please input the value of variable d: 2  a value: 3.0  b value: 6.0  c value: 9.0  d value: 2.0  ((a + b) / (c - d)) \* d = 2.5714285714285716 |

1.2

a1 = float(input("請輸入係數 a1:"))

b1 = float(input("請輸入係數 b1:"))

c1 = float(input("請輸入係數 c1:"))

a2 = float(input("請輸入係數 a2:"))

b2 = float(input("請輸入係數 b2:"))

c2 = float(input("請輸入係數 c2:"))

x = (c1\*b2 - c2\*b1) / (a1\*b2 - a2\*b1)

y = (c1\*a2 - c2\*a1) / (b1\*a2 - a1\*b2)

print("x = ",x)

print("y = ",y)

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| 請輸入係數 a1:1  請輸入係數 b1:3  請輸入係數 c1:2  請輸入係數 a2:6  請輸入係數 b2:3  請輸入係數 c2:1  x = -0.2  y = 0.7333333333333333 |

1.3

a = float(input("請輸入 a:"))

b = float(input("請輸入 b:"))

c = (a\*\*2 + b\*\*2) / (a\*\*2 - b\*\*2)

print("c = ",c)

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| 請輸入 a:2  請輸入 b:3  c = -2.6 |

1.4

a = float(input("請輸入 a:"))

b = float(input("請輸入 b:"))

c = (a\*\*2 + b\*\*2)\*\*0.5

print("c = ",c)

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| 請輸入 a:5  請輸入 b:14  c = 14.866068747318506 |

1.5

a = float(input("請輸入 a:"))

b = float(input("請輸入 b:"))

c = float(input("請輸入 c:"))

c = a - (b + c) \* (3 \* a - c)

print("c = ",c)

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| 請輸入 a:20  請輸入 b:9  請輸入 c:17  c = -1098.0 |