12组成员名单：

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黄锦辉 写Word文档

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Private Sub CommandButton1\_Click()

Dim dms(1 To 4) As Double '定义数组存储度和弧度值

Dim hudu(1 To 4) As Double

Dim i As Single

For i = 1 To 4 '循环调用函数将度转化为弧度，并存入数组

dms(i) = Cells(2 + i, "B")

hudu(i) = dutohudu(dmstodu(dms(i)))

Next

Dim XA#, YA#, XB#, YB#, XC#, YC# '读取坐标

XA = [C3]: YA = [D3]: XB = [C4]: YB = [D4]: XC = [C6]: YC = [D6]

Dim XP1#, YP1#, XP2#, YP2# '计算P1,P2 坐标

XP1 = (XA / Tan(hudu(2)) + XB / Tan(hudu(1)) - YA + YB) / (1 / Tan(hudu(1)) + 1 / Tan(hudu(2)))

YP1 = (YA / Tan(hudu(2)) + YB / Tan(hudu(1)) + XA - XB) / (1 / Tan(hudu(1)) + 1 / Tan(hudu(2)))

XP2 = (XB / Tan(hudu(4)) + XC / Tan(hudu(3)) - YB + YC) / (1 / Tan(hudu(3)) + 1 / Tan(hudu(4)))

YP2 = (YB / Tan(hudu(4)) + YC / Tan(hudu(3)) + XB - XC) / (1 / Tan(hudu(3)) + 1 / Tan(hudu(4)))

[C9] = Round(XP1, 2): [D9] = Round(YP1, 2) '输出P1,P2坐标,保留两位小数

[C10] = Round(XP2, 2): [D10] = Round(YP2, 2)

Dim S As Double '计算精度限差

S = Sqr((XP1 - XP2) ^ 2 + (YP1 - YP2) ^ 2)

[D12] = Round(S, 2)

End Sub

Function pi1()

pi1 = Application.WorksheetFunction.pi() '调用Excel中的pi

End Function

Function dmstodu(dms) '度分秒转化为度

Dim d1#: Dim m1#: Dim s1#

d1 = Int(dms)

m1 = Int((dms - d1) \* 100)

s1 = (((dms - d1) \* 100) - m1) \* 100

dmstodu = d1 + m1 / 60 + s1 / 3600

End Function

Function dutohudu(du) '度转化为弧度

dutohudu = du \* pi1 / 180

End Function