WORKSHEET **1**

Q1/ Write an algorithm and draw a flowchart to read length in millimetre and convert to centimetre

```
S1=START
S2= READ MILLIMETRE
S3= CENTIMETER= MILLIMETRE/100
S4= PRINT SENTIMETER
S5= END
```

Q2/Write an algorithm and draw a flowchart to read length of width and height and compute area and circumference (perimeter) of the rectangle.

```
S1=START

S2= READ L

S3= AREA=A*B

S4= PERIMETER=2(A+B) Color of business

S5= PRINT PERIMETER, AREA

S6=END
```

Q3/Write an algorithm to read length of radios and compute area and circumference (perimeter) of circle.

```
S1=START
S2=READ L
S3= AREA=πR<sup>2</sup>
S4=PERIMETER=2πR
S5= PRINT PERIMETER, AREA
S6= END
```

Q4/Write an algorithm and draw a flowchart that will calculate the roots of a quadratic equation: $ax^2 + bx + c = 0$ Hint: $d = \int b^2 - 4ac$, and the roots are: $x^2 = (-b + d)/2a$ and $x^2 = (-b - d)/2a$

```
S1=START

S2= READ A,B,C

S3= D=\sqrt{(-B^2/A)} - 2*A*(-B<sup>2</sup>)

S4= D=\sqrt{(-B^2/A^2)} + 2*A*B<sup>2</sup>

S5=PRINT D

S6= END
```

Q5/write an algorithm to find the result of equation:

```
غير مسؤول عن صحة حل الأسئلة الموجودة في الملف , كما تعلمون دكتور المادة لم يحدد ما إن كانت اجوبتنا
صحيحة في الـ WORKSHEET ام لا لذلك انصحكم بتجربة الاجوبة واحداً تلو الآخر في الحاسوب لتعرفوا ما ان كان
الناتج صحيح ام لا علما اني جربتها وأظهرت ناتجاً صحيحاً...
```



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Q6/Write algorithm and draw a flowchart to read the cities of Iraq as numbers and print the estimation to refer to it. Hint: 1 Baghdad, 2 Basra, 3 Mosul, 4 Erbil

```
S1=START

S2= READ CITIES OF IRAQ

S3= IF 1 CITIES OF IRAQ PRINT 'BAGHDAD'

S4= IF 2 CITIES OF IRAQ PRINT 'BASRAH'

S5= IF 3 CITIES OF IRAQ PRINT 'MOSUL'

S6= IF 4 CITIES OF IRAQ PRINT 'ERBIL'
```