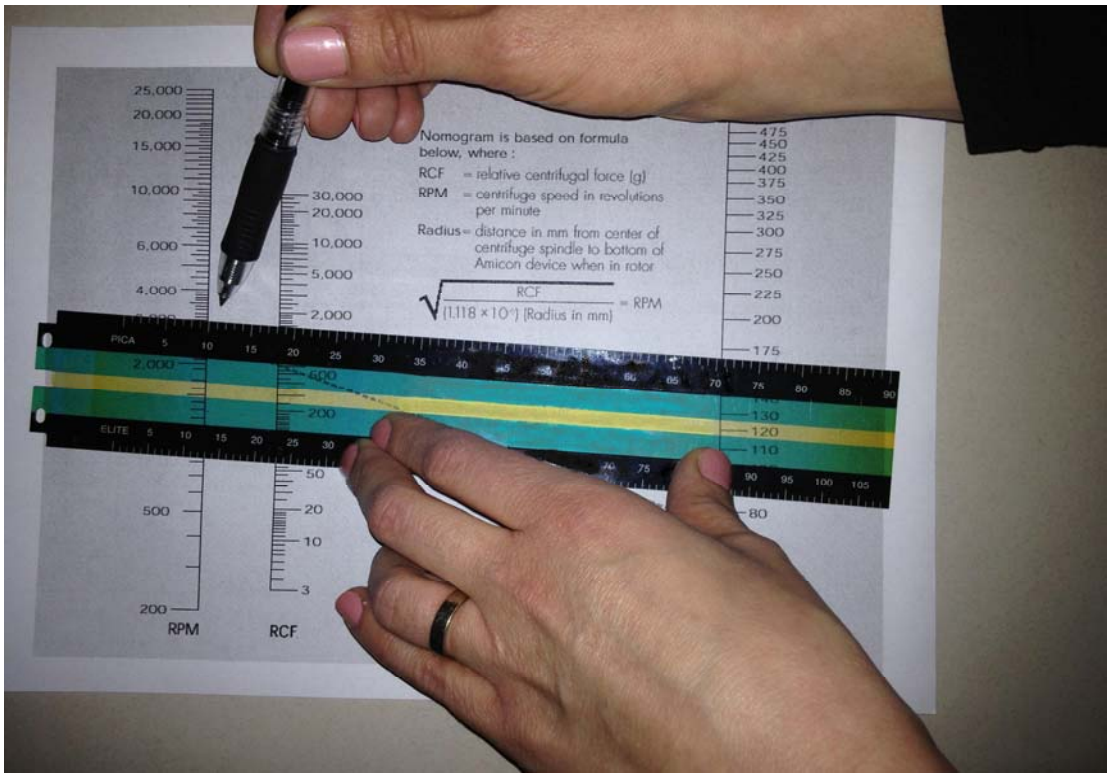
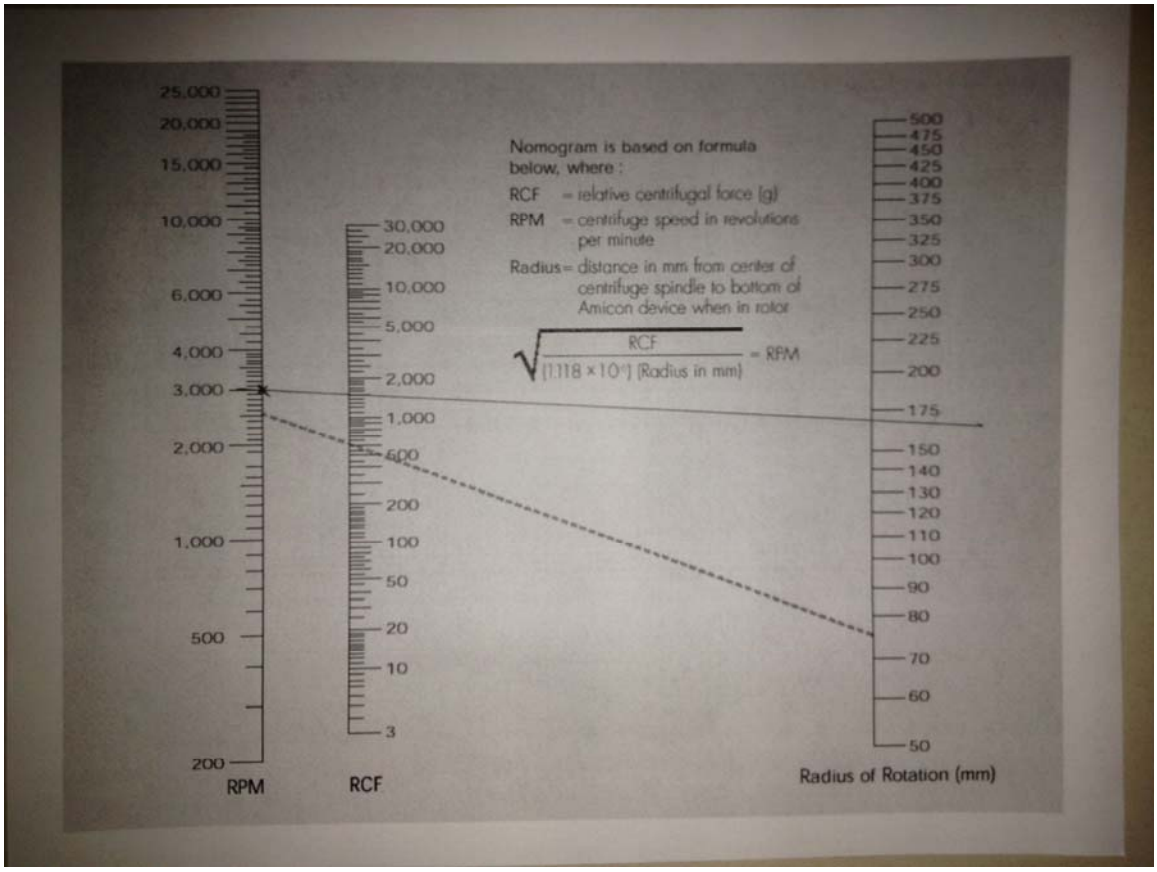
NOMOGRAM INSTRUCTIONS

To convert RPM to RCF (or G-force)

1. Determine centrifuge's radius of rotation (in mm) by measuring distance from center of centrifuge spindle to bottom of device when inserted into rotor.

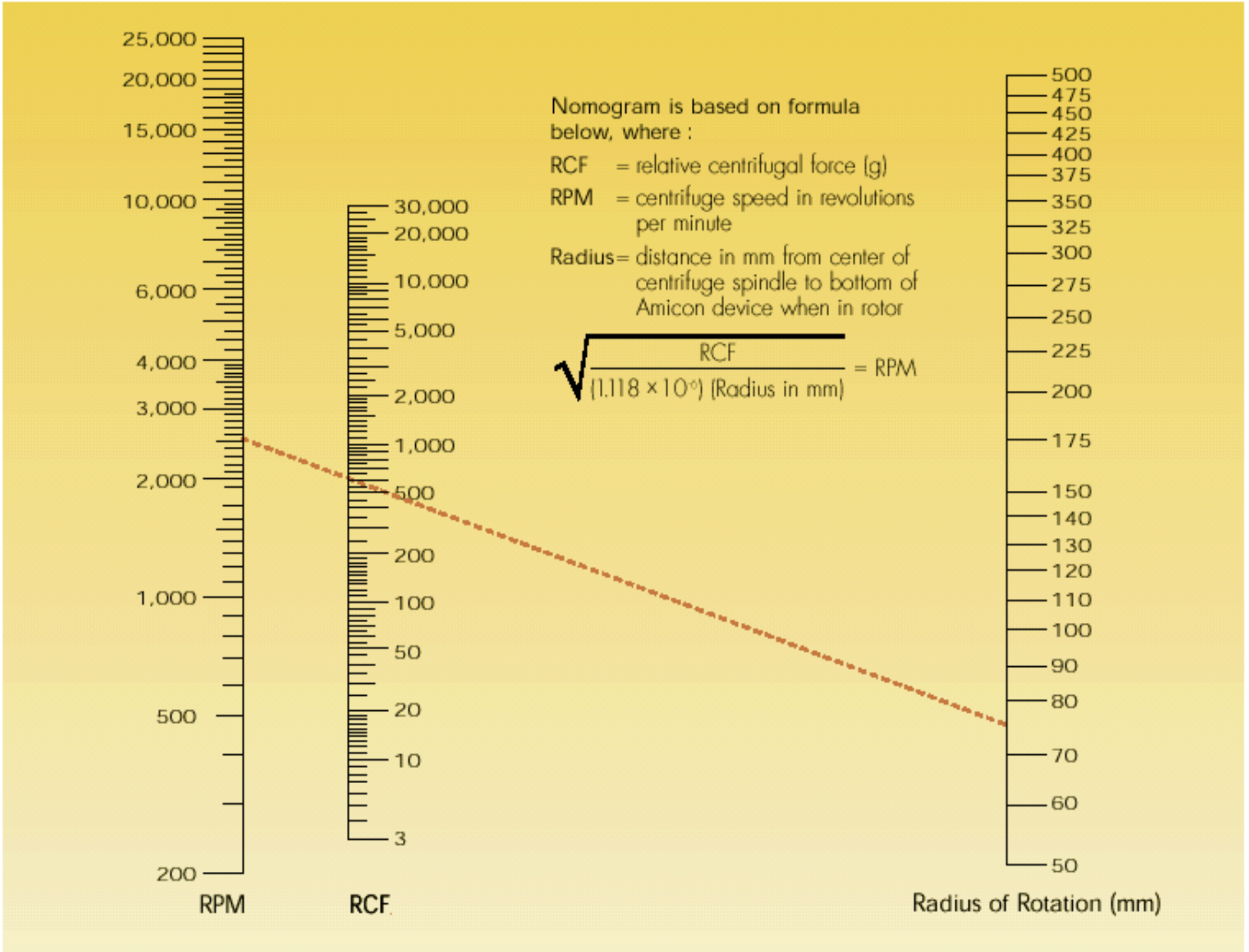


2. Lay a ruler and draw a line from radius value in right-hand column to 1500 RCF in the middle column and continue the line to the RPM column on the left.



3. Read the RPM value from column at left. This is the value you will enter into your centrifuge to equal 1500 RCF (G-force).

In this example the radius is 170 mm and the RPM is 3000 to equal an RCF (G-force) of 1500.


25,000
20,000
15,000
10,000
6,000
4,000
3,000
2,000
1,000
500
200
RPM
30,000
20,000
10,000
5,000
2,000
1,000
500
200
100
50
20
10
3
RCF
Nomogram is based on formula below, where :
RCF = relative centrifugal force (g)
RPM = centrifuge speed in revolutions per minute
Radius = distance in mm from center of centrifuge spindle to bottom of Amicon device when in rotor
√(RCF / (1.118 × 10⁻⁶) (Radius in mm)) = RPM
500
475
450
425
400
375
350
325
300
275
250
225
200
175
150
140
130
120
110
100
90
80
70
60
50
Radius of Rotation (mm)