

1. $\mu=80, \sigma=8$
 Tom: $z=(X-\mu)/\sigma=0.5$
 Mary: 查表知 z 在 0.25 至 0.26 之间
 John: $z=0.75$
 所以 John>Tom>Mary
2. a) $0.5-0.4013-[0.5-p(2266)]=0.1747$
 b) $1-(0.1587+0.0068) = 0.8345$
 c) $1-(0.2266+0.0228)=0.7506$
3. a) $z=(80-75)/9=0.55, p=1-0.2912=0.7088$
 b) $z=(94-75)/9=2.11, p=1-0.0174=0.9826$
 c) $z_1=(63-75)/9=-1.33, z_2=(88-75)/9=1.44, p=1-0.0749-0.0918=0.8333$
 d) $z_1=(72-75)/9=-0.33, z_2=(78-75)/9=0.33, p=1-0.3707-0.3707=0.2586$
4. $z=(106-100)/12=0.5, p=0.3085$, 正偏态分布均数相较正态分布右偏, 故 $p<0.03085$
5. a) $E=np=80$
 b) $20>10, 80>10$, 可视作正态分布, $\mu=80, \sigma=4, z=15/4=3.75, P=0.00008$
 c) $z=14/4=3.50, P=1-0.0002=0.9998$
 d) $P=0.0002-0.00008=0.00012$
6. $p=q=0.5, 18>10$, 可视作正态分布, $\mu=18, \sigma=3, z=6/3=2.00, P=0.0228$