Self Assessment Quiz

1) $83.2 + \dfrac{8.4}{54}(34 - 25)$ =84.6

2) Round 96.3516 to 2 decimal places = 96.35

3) Convert 13.09% to a decimal = 0.1309

4) Convert 0.057 to a percent = 5.7%

5) Rearrange the following numbers in order from low to high
   -4, -6, -1, 0, -2 = -6 -4 -2 -1 0

6) $5^2 + 3^3 + 4^5 - \dfrac{(5+3+7)^2}{3}$ = 25 + 27 + 1024 − $(15)^2$/3 =1001

For questions 7-10 refer to the following set of data. Compute the indicated quantities

$\underline{X}$
5
8
0
4
-2

7) ΣX = 5+8+0+4-2=15
8) $\Sigma X^2 = 5^2 + 8^2 + 0^2 + 4^2 + (-2)^2$ = 25+64+0+16+4=109
9) $(\Sigma X)^2 = (5+8+0+4-2)^2 = (15)^2$=225
10) $\Sigma(X-2)$ = (5-2) + (8-2) + (0-2) + (4-2) + (-2-2) = 3 + 6 - 2 +2− 4 = 5

For questions 11-13 refer to the following data. Compute the indicated quantities

$\underline{X}$	$\underline{Y}$
12	-2
10	-1
5	5

11) ΣXY =(12*-2)+(10*-1)+(5*5)=-24-10+25=-9
12) $(\Sigma X)(\Sigma Y)$ =(12+10+5)*(-2-1+5)=27*2=54
13) $\Sigma(X-Y)^2$ =(12-(-2))^2+(10-(-1))^2+(5-5)^2=196+121+0=317

14) If a calculator computation yielded the display 3.2×10^{-4}, what number is being represented by this display? = 0.00032

For questions 15-16: Write the following numbers in scientific notation

15) $195300 = 1.953 \times 10^5$
16) $0.000577 = 5.77 \times 10^{-4}$

17) $5! = 5*4*3*2*1 = 120$

18) $\dfrac{8!}{5!} = (8*7*6*5*4*3*2*1)/(5*4*3*2*1) = 336$

For questions 19-20 solve for X

19) $12 - 5X = -8$
       12 + 8 = 5X
       20 = 5X
       X=4

20) $3 + \dfrac{12}{X} = 5$
       3x + 12 = 5x
       12 = 2x
       X=6

21) $\dfrac{X-10}{3} > 2$
       x-10 > 6
       x > 16

22) $5 - 4X < -3$
       5 <4X-3
       8 < 4X
       2 < X
       X > 2

23)   Solve for the equation $Z = \dfrac{X - \mu}{\sigma}$. If X=-7, μ=1, σ=2, Z=?
       Z=(-7-1)/2=-4

24)   Round 96.3516 to 1 decimal place = 96.4