NCFE PRACTICE #6

1. Multiply: $(x-5)(x^2+5x+25)$

2. Which of the following is the solution for $3(4)^x = 15$?

   A) $\frac{\log 15}{\log 4}$ C) $\frac{\log 3}{\log 4}$

   B) $\frac{\log 5}{\log 4}$ D) $\frac{\log 3}{\log 15}$

3. Solve for x: $\frac{6x+20}{x^2} + \frac{1}{x} = \frac{3}{x}$

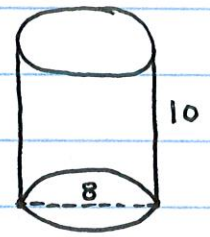
   A) $x = 4$ C) $x = -5$

   B) $x = -3$ D) No sol.

4. Find the radius of a circle with Area = 153.86.

5. Divide: $\frac{8x^3 + 24x^2 - 5x - 15}{x+3}$

6. Find the volume of the cylinder.



7. Convert $\frac{8\pi}{3}$ to degrees.

⑧ <u>Multiply</u>: $\left(\frac{1}{t^2}\right)\left(\frac{1}{t}\right)\left(\frac{3t^2}{4}\right)$

⑨ Find the <u>diameter</u> of the circle below.

$$x^2 + y^2 - 8x + 22y - 88 = 0$$

$\boxed{10}$ What is the $\cos 30^\circ$?