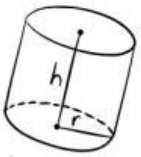
MATCH THE CORRECT ANSWER

$V = \frac{4}{3}\pi r^3$

Find the Laplace transform for the following equation by using Table of Laplace Transform :



$V = \pi r^2 h$

1. $f(t) = 20t$

$$F(s) = \frac{20s}{(s^2+25)^2}$$

2. $f(t) = 3\cos 2t$

$$F(s) = \frac{20}{s^2}$$

3. $f(t) = 7t^3$

$$F(s) = \frac{42}{s^4}$$

4. $f(t) = e^{-t}\cosh 7t$

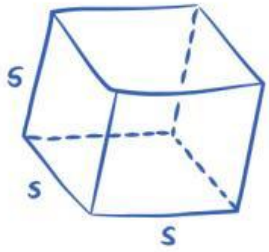
$$F(s) = \frac{3s}{s^2+4}$$

5. $f(t) = e^{-8t}$

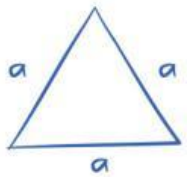
$$F(s) = \frac{s+1}{(s+1)^2-49}$$

6. $f(t) = 2t\sin 5t$

$$F(s) = \frac{1}{s+8}$$



$V = s^3$



$A = \frac{\sqrt{3}}{4}a^2$

$\frac{x}{a} + \frac{y}{b} = 1$