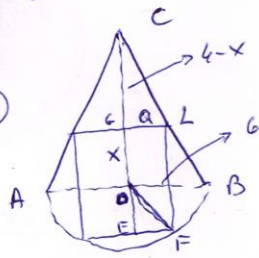


2.87
92

(K)



$GD = x$ / MOJ
o/ka/ o/ka/ o/ka/ o/ka/

$$\frac{CG}{CD} = \frac{BL}{DB}$$

$$\frac{4-x}{4} = \frac{a}{6}$$

$$24 - 6x = 4a$$

$$\boxed{x = 4 - \frac{2}{3}a}$$

$$r=6 \leftarrow DF^2 = DE^2 + EF^2$$

$$DE^2 = 36 - a^2$$

$$DE = \sqrt{36 - a^2}$$

: $\triangle DEF$

$$P = f(a) = 2(LF + 2a) = 2(GD + DE + 2a) =$$

$$= 2\left(\frac{2}{3}a + \sqrt{36 - a^2} + 2a\right)$$

$$= 8 + \frac{8}{3}a + 2\sqrt{36 - a^2}$$

(P)

$$f' = \frac{8}{3} + \frac{2 \cdot 2a}{2\sqrt{36 - a^2}}$$

$$8\sqrt{36 - a^2} = 6a$$

$$64(36 - a^2) = 36a^2 \rightarrow 64 \cdot 36 = 100a^2$$

$$a^2 = \frac{64 \cdot 36}{100} \rightarrow a = \frac{8 \cdot 6}{10} = 4.8$$

$$f(4.8) = 8 + \frac{8}{3} \cdot 4.8 + 2\sqrt{36 - 4.8^2}$$

$$= 8 + 12.8 + 2 \cdot 3.6 = 21.6 + 7.2 = 28.8$$