

$$4) \quad H = \sqrt{(2.1)^2 - \frac{37}{81}}$$

$$\textcircled{1/2} \quad = \sqrt{\left(\frac{2+1}{1} \frac{1}{9}\right)^2 - \frac{37}{81}}$$

$\textcircled{1/2}$

$$H = \sqrt{\left(\frac{19}{9}\right)^2 - \frac{37}{81}}$$

$$= \sqrt{\frac{38}{81} - \frac{37}{81}}$$

$$H = \frac{1}{9}$$

$$5) \quad \text{Area Shaded} = \text{Area } ABCD - A_{\text{circle}}$$

$$= \frac{\text{height} (\text{base}_1 + \text{base}_2)}{2} - \frac{\pi r^2}{2} \quad r = \frac{AD}{2}$$

$$r = 2x$$

$$= \frac{AD}{2} (DC + AB) - \frac{\pi(4)}{2}$$

$\textcircled{1}$

$$= \frac{4}{2} (x+4+x) - 2\pi$$

$$20 - 2\pi = 2(2x+4) - 2\pi$$

$$20 - 2\pi = 4x + 8 - 2\pi$$

$$4x + 8 - 2\pi = 20 - 2\pi$$

$$4x = 20 - 8$$

$$x = \frac{12}{4}$$

$\textcircled{1/2}$

$$x = 3 \text{ cm.}$$

$\textcircled{C}$