ERRATA for
FE Environmental Practice Exam
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Revisions are shown in red.

Question 5, p. 9:

The question should read as follows:

5.   Given the function $f(x) = 1/(x-2)$, the linear approximation of $f(x)$ around $x = -1$ is most nearly:

Solution 25, p. 64:

The solution should read as follows:

25.   Refer to the Cylindrical Pressure Vessel section in the Mechanics of Materials chapter of the *FE Reference Handbook*.
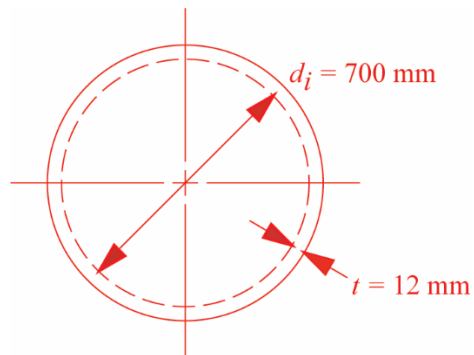
The cylinder can be considered thin-walled if $\dfrac{t}{\frac{d_i}{2}} \leq 0.10$. In this case, $t = 12$ mm and $d_i = 700$ mm.

Since $\dfrac{t}{\frac{d_i}{2}} = \dfrac{12}{350} = 0.034$ which is ≤ 0.10, the pipe is thin-walled.

Thus $\sigma_t = \dfrac{P_i r}{t}$

where $r = \dfrac{r_i + r_o}{2} = \dfrac{350 + 362}{2} = 356$ mm

$\sigma_t = \dfrac{(1.680 \text{ MPa})(356 \text{ mm})}{12 \text{ mm}} = 49.8 \text{ MPa}$

$d_i = 700$ mm

$t = 12$ mm

THE CORRECT ANSWER IS: B