

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

Question 8, p. 11:

The options should read as follows:

- A. (19.5%, 26.9%)
- B. (20.3%, 26.1%)
- C. (20.6%, 25.8%)
- D. (20.9%, 25.5%)

Question 23, p. 19:

The options should read as follows:

- A. 78.0
- B. 78.6
- C. 118.5
- D. 168.4

Question 95, p. 55:

The options should read as follows:

- A. behind schedule with a cost savings
- B. ahead of schedule with a cost savings
- C. behind schedule with a cost overrun
- D. ahead of schedule with a cost **overrun**

Solutions Table, p. 60:

8: The correct answer is B.

78: The correct answer is B.

91: The correct answers are A, B, C.

Solution 8, p. 63:

Refer to the t-Distribution section in the Engineering Probability and Statistics chapter of the *FE Reference Handbook*.

For a 99% confidence interval, $\alpha = 0.01 \rightarrow \alpha/2 = 0.005$.

Use Student's t-distribution with $\nu = 3$. Refer to the table, where $t_{0.005,3} = 5.841$.

Confidence interval = $23.2\% \pm [5.841 \times (1/2)] = 23.2\% \pm 2.921\% = (20.3\%, 26.1\%)$

THE CORRECT ANSWER IS: B

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Solution 23, p. 70:

The solution should read as follows:

- 23.** Refer to the Moment of Inertia section in the Statics chapter of the *FE Reference Handbook*.

$$\begin{aligned}I_{xc} &= h^3(a^2 + 4ab + b^2)/36(a + b) \\ &= 6^3[(3^2 + (4 \times 3 \times 6) + 6^2)]/[36 \times (3 + 6)] \\ &= 78 \text{ in}^4\end{aligned}$$

$$\begin{aligned}y_c &= 6[2(3) + 6]/[3 \times (3 + 6)] = 2.667 \text{ in.} \\ 4.5 - 2.667 &= 1.83 \text{ in}\end{aligned}$$

$$\begin{aligned}A &= h(a + b)/2 \\ A &= 6(3 + 6)/2 = 27 \text{ in}^2\end{aligned}$$

$$\begin{aligned}I_{x'} &= I_{xc} + d_y^2 A \\ &= 78 + (1.83^2)(27) \\ &= 168.4 \text{ in}^4\end{aligned}$$

THE CORRECT ANSWER IS: D

Solution 91, p. 103

Option A: **True.** A 75-mph free-flow speed freeway has a breakpoint of 1,000 pc/h/ln, while a 55-mph freeway has a breakpoint of 1,800 pc/h/ln. The breakpoint is defined by the *Highway Capacity Manual* as the volume for which the operating speeds becomes lower than the free-flow speed.

THE CORRECT ANSWERS ARE: A, B, C