ERRATA for
Fundamentals of Surveying Practice Exam
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Revisions are shown in red.

Question 27, p. 19:
Question 27 has been replaced with the following.

The difference between float and fixed GPS solutions is that:

○ A. N is solved in the fixed solution but not in the float solution.
○ B. N is solved in the float solution but not in the fixed solution.
○ C. The float solution is more accurate.
○ D. The float solution uses the C/A code, while the fixed solution uses the L1 signals.

Solutions Table, p. 32:
9: C
27: A
49: 1.9600
50: C

Solution 9, p. 34:

$$S = \frac{8.1}{12,000} \times \frac{6.75}{X} = \frac{6.75(12,000)}{8.1}$$

$$= 10,000$$

THE CORRECT ANSWER IS: C

Solution 27, p. 38:
N, integer ambiguity, is solved in the fixed solution but not in the float solution.

THE CORRECT ANSWER IS: A

Solution 49, p. 44:
The NSSDA statistic is determined by multiplying the RMSE by a value that represents the standard error of the mean at the 95 percent confidence level: 1.7308 when calculating horizontal accuracy, and 1.9600 when calculating vertical accuracy. See Section F of NSPS Model Standards in the Appendices of the *FS Reference Handbook* 2.0.

THE CORRECT ANSWER IS: 1.9600

Solution 50, p. 44:

Reference: NCEES *FS Reference Handbook*, Error Propagation

Error is "error of a sum", similar to a long line measured in parts and an error in each part.

$$\sigma_{sum} = \sqrt{\sigma_1{}^2 + \sigma_2{}^2 \cdots + \sigma_n{}^2}$$

$$\sigma_{sum} = \sqrt{0.15^2 + 0.20^2 + 0.15^2 + 0.20^2}$$

$$\sigma_{sum} = \sqrt{2(0.15)^2 + 2(0.20)^2}$$

$$\sigma_{sum} = 0.35$$

THE CORRECT ANSWER IS: C