

ERRATA for
Fundamentals of Surveying Practice Exam
ISBN 978-1-947801-06-6
Copyright 2020 (1st Printing, January 2020)
Errata posted 11/15/2022

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:

27: A

49: 1.9600

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

ERRATA for
Fundamentals of Surveying Practice Exam
ISBN 978-1-947801-06-6
Copyright 2020 (1st Printing, January 2020)
Errata posted 11/15/2022

Solution 50, p. 44:

The solution to find the perimeter is $P = 2X + 2Y$.

The maximum error is a vector with components of $2(\sigma_x)$, $2(\sigma_y)$.

Draw a right triangle with the sides $2(\sigma_x)$ and $2(\sigma_y)$ and solve for the hypotenuse.

So the magnitude is the hypotenuse, which is the square root of the sum of the squares of the sides as follows.

The equation for the uncertainty is

$$\begin{aligned}\sigma &= \sqrt{4\sigma_x^2 + 4\sigma_y^2} \\ &= \sqrt{4(0.15)^2 + 4(0.20)^2} \\ &= 0.50 \text{ ft}\end{aligned}$$

THE CORRECT ANSWER IS: B