



Name _____ Class _____ Date _____

AFTER THIS WORKSHEET YOU CAN

- ✓ Compute the population variance. ✓ Compute the sample variance (dividing by $n - 1$).
 ✓ Understand variance as the mean squared deviation. ✓ Recognise that variance is never negative.



Section A • Concept Check

• BEGINNER

$4 \times 1 = 4$

- 1 The population variance of 3, 6, 9, 12 is:
☐ A. 11.25 ☐ B. 22.5 ☐ C. 15 ☐ D. 45
- 2 The sample variance of 3, 6, 9, 12 is:
☐ A. 15 ☐ B. 11.25 ☐ C. 30 ☐ D. 45
- 3 The population variance of 5, 5, 5, 5, 5 is:
☐ A. 0 ☐ B. 5 ☐ C. 25 ☐ D. 1
- 4 Sample variance divides the squared deviations by:
☐ A. n ☐ B. $n - 1$ ☐ C. $n + 1$ ☐ D. 2



Section B • Problem Solving

• INTERMEDIATE

$2 + 3 \times 3 = 11$

- 5 Variance is the average _____ deviation from the mean.
- 6 Population variance divides by _____
- 7 Find the population variance of 3, 6, 9, 12.

- 8 Find the sample variance of 3, 6, 9, 12.

- 9 Find the population variance of 5, 5, 5, 5, 5.



Section C • Challenge

• CHALLENGE

5

- 10 Find the population variance of 2, 4, 4, 4, 5, 5, 7, 9.

Reflection — the most useful thing I learned: _____

A ___/4 B ___/11 C ___/5 Total ___/20

Teacher's Signature _____

Parent's Signature _____

ANSWER KEY — FOLD OR CUT BEFORE HANDING OUT

1-A 2-A 3-A 4-B | 5 squared 6 n 7 = 11.25 8 = 15 9 = 0 | 10 = 4