Lesson 8.2 Practice: Bearings and Navigation

School Launch · Trigonometry · Unit 8: Applications · Worksheet A

Scientific calculator

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. A ship sails 52 mi on a bearing of N$14°$E, then turns and sails 18 mi on a bearing of S$76°$E. How far is it from its start (nearest tenth)? EASY

2. A ship sails 24 mi on a bearing of N$60°$E, then turns and sails 38 mi on a bearing of S$30°$E. How far is it from its start (nearest tenth)? EASY

3. A ship sails 50 mi on a bearing of N$46°$E, then turns and sails 30 mi on a bearing of S$44°$E. How far is it from its start (nearest tenth)? EASY

4. A ship sails 17 mi on a bearing of N$64°$E, then turns and sails 45 mi on a bearing of S$26°$E. How far is it from its start (nearest tenth)? MEDIUM

5. A ship sails 60 mi on a bearing of N$40°$E, then turns and sails 23 mi on a bearing of S$50°$E. How far is it from its start (nearest tenth)? MEDIUM

6. A ship sails 15 mi on a bearing of N$17°$E, then turns and sails 19 mi on a bearing of S$73°$E. How far is it from its start (nearest tenth)? MEDIUM

7. A ship sails 13 mi on a bearing of N$71°$E, then turns and sails 39 mi on a bearing of S$19°$E. How far is it from its start (nearest tenth)? MEDIUM

8. A ship sails 51 mi on a bearing of N$66°$E, then turns and sails 52 mi on a bearing of S$24°$E. How far is it from its start (nearest tenth)? HARD

9. A ship sails 37 mi on a bearing of N$14°$E, then turns and sails 23 mi on a bearing of S$76°$E. How far is it from its start (nearest tenth)? HARD

10. A ship sails 11 mi on a bearing of N$31°$E, then turns and sails 22 mi on a bearing of S$59°$E. How far is it from its start (nearest tenth)? HARD