

Fall 2007 Exam 3 Answer Key

1. A
2. B
3. D
4. A
5. A
6. B
7. C
8. D (We didn't cover this one this semester.)
9. (a) FALSE
(b) TRUE
(c) TRUE
(d) FALSE
(e) TRUE
(f) FALSE
10. $\frac{\sqrt{6} - \sqrt{2}}{4}$
11. We didn't cover this one this semester.
12. $20 \tan 20^\circ + 20 \tan 50^\circ$ ft. There are other ways to express the answer, but any answer should evaluate to ≈ 31.1145 ft.
13. We won't cover this one until after the third test.
 - (a) $(11, -4), (-4, 1)$
 - (b) Unbounded
14. (a) $x = \frac{\pi}{6} + k\pi, \frac{5\pi}{6} + k\pi, \frac{\pi}{3} + 2k\pi, \frac{2\pi}{3} + 2k\pi$, where k is any integer.
(b) 14
15. $\sqrt{101}$ mph