

MA 15400, Fall 2013

Exam 3 Answers

| Question | Green, Form A | | Orange, Form B | |
|----------|---------------|---|----------------|---|
| 1. | C | $\frac{\pi}{3}$ | A | $\frac{2\pi}{3}$ |
| 2. | D | $2x\sqrt{1-x^2}$ | C | $2x\sqrt{1-x^2}$ |
| 3. | B | 0.6660, 5.6172 | D | 0.6660, 5.6172 |
| 4. | A | $b = 18.4$ and $c = 9.2$ | B | $b = 18.9$ and $c = 8.1$ |
| 5. | C | 312 <i>yards</i> | D | 312 <i>yards</i> |
| 6. | D | 179 <i>miles</i> | A | 179 <i>miles</i> |
| 7. | A | There exist two possible triangles and one of the values of $b = 153.2$. | C | There exist two possible triangles and one of the values of $b = 153.2$. |
| 8. | C | $\langle 32, 10 \rangle$ | B | $\langle 32, 10 \rangle$ |
| 9. | E | $\ c\ = 8.9$ | E | $\ c\ = 8.9$ |
| 10. | D | $\theta = 138^\circ$ | C | $\theta = 129^\circ$ |
| 11. | C | $\langle -30, 40 \rangle$ | D | $\langle 30, -40 \rangle$ |
| 12. | B | 119.3° | A | 113.9° |
| 13. | D | $m = 2.4$ | B | $m = 3.75$ |
| 14. | A | 465 <i>mph</i> | C | 465 <i>mph</i> |
| 15. | B | 159° | D | 159° |