# Exam 3A

| Question # | Form A<br>Fall 2012 | Answer |
|---|---|---|
| 1 | D | $\frac{5}{18}$ |
| 2 | A | $k = 20$ |
| 3 | D | $D = [-5, 0]; R = [1, 3]$ |
| 4 | E | See graph on exam |
| 5 | B | $f(x) = 3(x + 2)^2 + 5$ |
| 6 | A | 13; minimum value |
| 7 | B | 5 |
| 8 | B | There is one solution.<br>It is in Quadrant II. |
| 9 | D | Vertically stretch the graph of $y = f(x)$ by 5 and horizontally compress by $\frac{1}{3}$ |
| 10 | A | $(-\infty, -2) \cup (5, \infty)$ |
| 11 | C | $x = -\frac{2}{5}, x = 1$ |
| 12 | D | See graph on exam |
| 13 | C | $k = \frac{1}{2}$ |
| 14 | A | $y = -\frac{5}{36}(x - 6)^2 + 5$ |
| 15 | D | 406 feet |