

MATH 1111 Practice Final Exam #2 Key

1. $\frac{28x^6}{y^4}$
2. $3x^2 + x - 2$
3. $\frac{3x^2(x+3)}{(x-3)}$
4. $8xy\sqrt{14x}$
5. $2(\sqrt{3}+1)$ or $2\sqrt{3}+2$
6. $\left\{\frac{2}{5}\right\}$
7. 6.5 hours
8. $\left\{-\frac{14}{3}, \frac{28}{3}\right\}$
9. $\{3-7i, 3+7i\}$
10. $\{\pm 1, \pm\sqrt{2}\}$
11. $\{2\}$
12. $\frac{17}{25} - \frac{6}{25}i$
13. $-1 < x < 1$ or $(-1, 1)$
14. $d = \sqrt{41}$
15. $m = 2$
16. $y = -2x + 7$ or $2x + y - 7 = 0$
17. $x = -2, \frac{3}{2}$ or $(-2, 0)$ and $\left(\frac{3}{2}, 0\right)$
18. At 3 seconds.
19. 9
20. $(2, \infty)$
21. 6
22. $(f \circ g)(x) = \frac{x-1}{x-5}$
23. $f^{-1}(x) = \frac{3x}{x-1}$
24. $(3, -4)$
25. 2
26. \$7,499.23
27. $\{\ln(11) - 2\}$ or $\{0.398\}$
28. $x^4 + x^2 + 1$
29. $\{(-2, 2)\}$
30. 