

Math 1050 Final Exam Answer Key

Fall 2018

1. $-5x^2y + (\sqrt{3} - 2)x + 2 \cdot 3^x + 4^x$

2. $\frac{y^{10}z^8}{x^3}$

3. 125

4. $37 + 2\sqrt{15}$

5. $x - 3$

6. a) 16 b) 12

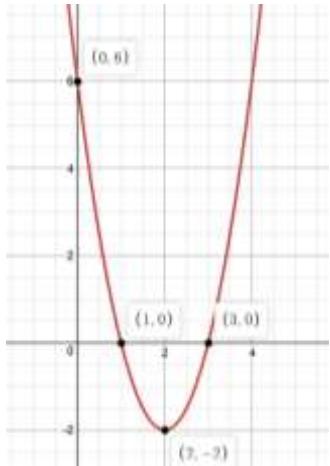
7. $\left[-\frac{3}{2}, \infty\right)$

8. $2x + h - 2$

9. a) $(-\infty, 1] \cup [3, \infty)$ b) $[1, \infty)$ c) 1 d) $\{-5, -1, 3\}$

10. $y = -\frac{3}{2}x + 4$

11. Vertex (2,-2), opens up; x-intercepts: (1,0), (3,0); y-intercept: (0,6)



12. $\{-1, 1\}$

13. $C = \frac{D^2}{AD-B}$

14. The width should be $3\sqrt{3}$ inches.

$$15. \{-1 \pm i\}$$

$$16. \{-8, 1\}$$

$$17. \left(-\frac{2}{3}, \frac{4}{3}\right)$$

$$18. (-\infty, -3) \cup (0, 3)$$

19. The movie theater sold 45 adult tickets and 15 children's tickets.

$$20. \text{ a.) } 5 \quad \text{ b.) } -2 \quad \text{ c.) } \frac{1}{2}$$

$$21. \text{ a.) } 1.5 \quad \text{ b.) } 1.2 \quad \text{ c.) } 1.4$$

$$22. x = -1$$

$$23. \cos(4) < 0 < \sin(3) < \sin(1)$$

$$24. x = \frac{5}{\tan(41^\circ)}$$