

Math 40 - Practice Final
Answers

1. $\frac{5}{2}$
2. $\frac{13}{42}$
3. $A = 58.5$ sq. ft., Cost is \$468.00
4. $7(1) = 7$ and $28 - 21 = 7$
5. $12a + 8b$
6. 77.69
7. 12.5%
8. no solution
9. 7.5 hours
10. \$5.60
11. $F = \frac{9}{5}C + 32$
 $F(10) = 50$
 $F(-10) = 14$
12. $(-\infty, 3]$
13. $(-5, -1]$
14. x-intercept: $(-3, 0)$
y-intercept: $(0, 3)$
15. $x = -\frac{1}{2}, y = \frac{7}{2}$
16. identity
17. x-intercept: $(5, 0)$
y-intercept: $(0, 3)$

18. 21 meters
19. -243
20. $-x^2y^2$
21. $\frac{x^{32}}{16y^4z^4}$
22. No, exponents must be whole numbers.
23. Yes, degree 7
24. $-7x + 2y$
25. $9a^2 - 12a + 4$
26. $9a^2 - 4$
27. $24a^2x + 14a^3 - 12x^3 - 14ax^2$
28. $-8x^4 + 20x^3 - 28x^2 + 24x$
29. $-3a - 4b + 5c$
30. $3x^2 - x - 4$
31. $(a + b)(2ax + a^2)$
32. $a(x^3 + y^3)(x^3 - y^3)$
33. $4(x + 1)(x - 1)$
34. $-(y - 7)(y - 3)$
35. $6(x - 4)(x - 1)$
36. $y = -\frac{8}{3}$ or $y = \frac{8}{3}$
37. $a = -1$ or $a = \frac{1}{2}$ or $a = -\frac{2}{3}$
38. $a = 5$