

HW 39

graphing & exp. practice

#1-4 see next page

5. $y = 2^x$
 over x-axis
 up 6
 right 1
 VD by 2

$$y = -2(2)^{x-1} + 6$$

6. $y = 5^x$
 up 1
 left 3

$$y = 5^{x+3} + 1$$

7. $y = \frac{1}{3}^x$
 left 1
 HD by 2

$$y = \left(\frac{1}{3}\right)^{\frac{x+1}{2}}$$

8. $y = \frac{1}{2}^x$
 down 5
 over y-axis
 VD by 4

$$y = 4\left(\frac{1}{2}\right)^{-x} - 5$$

9. x^{11}

10. y^6

11. $\frac{1}{4}a^5$

12. $\frac{2z}{3}$

13. $\frac{3p}{5t^4}$

14. c^{15}

15. $36x^2$

16. $-x^5$

17. x^6

18. $-8d^3$

19. 1

20. $125a^{18}b^3$

21. $81k^{28}$

22. $-27m^{15}$

23. m^7n^5

24. g^7h^8

25. $-6b^3c^7$

26. $(a^4b^2)(ab^3)$
 $= a^5b^5$

27. $(x^6y^6)(x^2y^3)$
 x^8y^9

28. $(16x^2)(-x^5y)$
 $-16x^7y$

29. $\frac{1}{81}$

30. $\left(\frac{3}{2}\right)^3 = \frac{27}{8}$

31. $\frac{1}{16a^4}$

32. $\frac{64x^6}{64x^6} = 1$

33. $\frac{1728a^6b^{15}}{216a^{21}b^3} =$
 $\frac{8b^{12}}{a^{15}}$

34. a) geometric 38. $y = 100(1.05)^x$

b) 5% growth 39. $u_{15} = 207.9$

35. a) arithmetic 38. $y = -7x + 55$

b) -17 39. $u_{15} = -200$

36. a) arithmetic 38. $y = 12x - 44$

b) +12 39. $u_{15} = 1346$

37. a) geometric 38. $y = 15(.875)^x$

b) 12.5% decay 39. $u_{15} = 2.02$

Graphing and Exponents Practice – Answers

