

**Algebra 1 Topic 6 Review WS – PARTIAL ANSWERS**

1 a.  $27x^6y^3$

b.  $24m^7n^5$

c.  $\frac{16x^5}{3y}$

2 a.  $7^{\frac{1}{2}}$

d.  $p^{\frac{3}{5}}$

3 b.  $x = \frac{7}{2}$

c.  $x = \frac{9}{4}$

5 a.  $y = 5(2)^x$

6 a.  $a_n = \frac{2}{3}(a_{n-1}), a_1 = 4$

7 b.  $a_n = 42(0.75)^{n-1}$

8 a.  $y = 40(1+0.12)^x$

b. 219

10 a. Domain  $(-\infty, \infty)$ , Range  $(0, \infty)$ , y-intercept  $(0, 78125)$ , asymptote  $y = 0$

c. Domain  $(-\infty, \infty)$ , Range  $(1, \infty)$ , y-intercept  $(0, 1.008)$ , asymptote  $y = 1$

11. Bank Sparta \$1785.51, Bank Skyline \$1786.41

12. 32.194