

Alg 2 Trig 6.4-6.7 Review Worksheet Answers

1. non real

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

5. -2

7.  $\frac{8}{9}$

9. 8

11. 1024 **hint:**  $\left((16)^{\frac{1}{2}}\right)^5$

13. 36

17.  $n^{\frac{8}{15}} \rightarrow \sqrt[15]{n^8}$

19.  $x^{\frac{5}{6}} \rightarrow \sqrt[6]{x^5}$

21.  $30\sqrt{15}$

23.  $\frac{1}{2}m^2n^5$

25.  $37\sqrt[3]{3}$

27.  $\sqrt{3}$

29.  $6-4\sqrt{3}$

31.  $\frac{-8\sqrt{y}}{y^3}$

33.  $4\sqrt{6}-4\sqrt{3}$

35.  $-4rw^5$

37.  $x=48$

39.  $x = 4$

41.  $p = -2$

43.  $n = 0$

2.  $\frac{10}{3}$

4.  $\frac{1}{2}$

6. 3

8. 11

10.  $\frac{9}{4}$  **hint:**  $\left(\left(-\frac{8}{27}\right)^{\frac{1}{3}}\right)^{-2}$

12. 1000

14.  $p^{\frac{8}{15}}$

18. 36

20.  $-2ab^4\sqrt{2ab^3}$

22.  $3m\sqrt{2}$

24. Rewrite problem

$$5\sqrt{8} + 3\sqrt{2} - 3\sqrt{50}$$

Answer:  $-2\sqrt{2}$

26.  $6\sqrt{2}-6\sqrt{15}+\sqrt{30}-15$

28. 2

30.  $16x+24\sqrt{x}+9$

32.  $\frac{8-2\sqrt{3}}{13}$

34.  $\frac{-\sqrt{6}+3\sqrt{2}+5\sqrt{3}}{-19}$

36.  $x + 5$  **hint: factor first!**

38.  $x = 3, x = 2$

40. no solution

42.  $x = \frac{1}{2}$

44.  $0 \leq b \leq 2$