

You must complete this before retaking the MC again. Remember it is all about LEARNING so take your time and learn how to do these skills. If you need help please ask!

NAME: _____

Corrective Assignment 8.1

Write each expression in exponential form:

1) $\frac{1}{(\sqrt[4]{a})^5}$

2) $(\sqrt[3]{6x})^2$

3) $\sqrt[3]{7p}$

4) $\frac{1}{\sqrt{7k}}$

Write each expression in radical form:

5) $(6p)^{-\frac{3}{2}}$

6) $x^{-\frac{3}{2}}$

7) $(6n)^{\frac{5}{2}}$

8) $(m^2)^{\frac{1}{6}}$

Find the indicated real nth root(s) of a:

9) $n = 3, a = -512$

10) $n = 4, a = -256$

11) $n = 5, a = 243$

12) $n = 6, a = 64$

Simplify: MUST SHOW WORK.

13) $(\sqrt[3]{216})^4$

14) $(\sqrt[3]{-1000})^2$

15) $\sqrt[3]{-64}$

16) $\sqrt[3]{-512}$

17) $(\sqrt[3]{-64})^5$

18) $(\sqrt[3]{512})^2$

19) $216^{\frac{1}{3}}$

20) $32^{\frac{7}{5}}$

21) $64^{\frac{1}{2}}$

22) $343^{-\frac{2}{3}}$

23) $32^{\frac{3}{5}}$

24) $625^{-\frac{3}{4}}$

Solve the equation:

25) $x^6 + 10 = 10$

26) $6x^3 = -1296$

27) $(x + 6)^3 = -343$

28) $(x - 10)^6 - 8 = 721$

29) $(x + 2)^5 = -1024$

30) $-12s^4 = -48$

ANSWERS TO CORRECTIVE ASSIGNMENT:

Make sure you check all your answers and make sure you KNOW how to do all of them. You could simply copy answers but that's not the point. The point is that you have to learn how to do this so please make sure that for any you don't understand you get help BEFORE taking the Mastery Check again.

1) $a^{-\frac{5}{4}}$

2) $(6x)^{\frac{2}{3}}$

3) $(7p)^{\frac{1}{3}}$

4) $(7k)^{-\frac{1}{2}}$

5) $\frac{1}{(\sqrt{6p})^3}$

6) $\frac{1}{(\sqrt{x})^3}$

7) $(\sqrt{6n})^5$

8) $\sqrt[6]{m^2}$

9) -8

10) no real roots

11) 3

12) 2 or -2

13) 1296

14) 100

15) -4

16) -8

17) -1024

18) 64

19) 6

20) 128

21) 8

22) $\frac{1}{49}$

23) 8

24) $\frac{1}{125}$

25) 0

26) -6

27) -13

28) 13 or 7

29) -6

30) 1.41 or -1.41