

THIS is a quiz/test replacement opportunity!

You must complete the following in order to use this as a quiz/test replacement opportunity:

- 1) Complete the problems showing all steps. If your work is not shown, you will not receive credit.**
- 2) Circle your final answer.**
- 3) Turn your completed work in at the beginning of class on Wednesday.**
- 4) You will tell me the "date" or "grade" of the assignment from Infinite Campus and it will be written ON THE LINE with your name on the TOP of this assignment.**
 - You may print this and write on this, OR use you notebook paper (please copy the orginial problem and problem number).**
 - None of this is "new" material. All of these topics have been covered in class.**

Simplify. When you are finished your answer will contain: one variable and a positive exponent.

1) $4x^3 \cdot 4x^{-3}$

2) $(4n^3)^{-3}$

3) $\frac{2m^{-4}}{m^{-1}}$

4) $\frac{2p^2 \cdot 2p^2}{4p^4}$

5) $(2p^3)^4 \cdot 2p^0 \cdot 2p^4$

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

Write each expression in exponential form.

7) $\frac{1}{\sqrt[4]{m}}$

8) $(\sqrt{3k})^5$

Write each expression in radical form.

9) $n^{\frac{7}{4}}$

10) $(3k)^{\frac{3}{4}}$

Solve each equation.

11) $1 = \sqrt{k-4}$

12) $\sqrt{3a-1} = \sqrt{3-a}$

13) $\sqrt{13-2a} = \sqrt{a-2}$

14) $\sqrt{20+8x} = x$

15) $b = \sqrt{-40+14b}$

16) $\sqrt{6x} = x$

Solve each equation.

$$17) 625 = a^{\frac{4}{3}}$$

$$18) 9 = x^{\frac{1}{2}}$$

$$19) x^{\frac{1}{2}} - 4 = 3$$

$$20) -2 + 4v^{\frac{3}{2}} = 2914$$