

Assignment

Date _____ Period _____

Simplify. Your answer should contain only positive exponents with no fractional exponents in the denominator.

1)
$$\frac{n^{-1}n^{\frac{1}{2}}}{(n^0)^2}$$

2)
$$\frac{b^{-\frac{3}{2}}}{\left(\frac{1}{b^3}\right)^0 \cdot b^{-1}}$$

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

4)
$$\frac{x^{\frac{4}{3}}}{x^{\frac{2}{3}}x^{\frac{5}{3}}}$$

5)
$$\frac{x^{\frac{3}{2}}}{x^2x^{\frac{1}{3}}}$$

6)
$$\frac{p^{\frac{4}{3}}p^2}{(p^{-1})^{\frac{1}{2}}}$$

7)
$$\frac{(r^2)^{-2}}{r^0r^{-\frac{5}{3}}}$$

8)
$$\left(\frac{r^{-\frac{1}{3}}r^{\frac{1}{3}}}{r^{\frac{1}{3}}}\right)^0$$

9)
$$\frac{\left(\frac{1}{n^2}\right)^2}{n^{\frac{5}{3}}n^{\frac{2}{3}}}$$

10)
$$\left(\frac{p}{pp^2}\right)^{-2}$$

11)
$$\frac{r^2}{r^{-3} \cdot (r^0)^{-2} \cdot r^{\frac{1}{2}}}$$

12)
$$\frac{\left(\frac{1}{k^2}\right)^{\frac{3}{2}}}{k^0k^{-\frac{5}{3}}}$$

13)
$$\left(\frac{x^{-\frac{3}{2}}x^{\frac{1}{3}}}{x^{\frac{1}{3}}}\right)^{\frac{5}{3}}$$

14)
$$\left(\frac{x^2x^{\frac{5}{3}}}{x^{\frac{5}{3}}}\right)^0$$

$$15) \frac{n^2 n^{\frac{1}{2}}}{n^{\frac{1}{2}} \cdot (n^2)^{-2}}$$

$$16) \frac{rr^{\frac{4}{3}}}{r^{-\frac{2}{3}}}$$

$$17) \frac{\left(b^{\frac{1}{3}} b^0\right)^{-\frac{3}{2}}}{b^{\frac{5}{3}} b^2}$$

$$18) \frac{v^{\frac{1}{3}}}{v^{\frac{1}{3}} \cdot \left(v^{\frac{5}{3}}\right)^{-1}}$$

$$19) \frac{x^2}{\left(x^{\frac{1}{2}} x^{\frac{2}{3}}\right)^{\frac{1}{2}}}$$

$$20) \frac{\left(x^{\frac{5}{3}}\right)^2}{x^{-1} x^0 \cdot x^{-2}}$$

Answers to Assignment (ID: 1)

$$1) \frac{n^{\frac{1}{2}}}{n}$$

$$5) \frac{x^{\frac{1}{6}}}{x}$$

$$9) \frac{n^{\frac{2}{3}}}{n^2}$$

$$13) \frac{x^{\frac{1}{2}}}{x^3}$$

$$17) \frac{b^{\frac{5}{6}}}{b^5}$$

$$2) \frac{b^{\frac{1}{2}}}{b}$$

$$6) p^{\frac{23}{6}}$$

$$10) p^4$$

$$14) 1$$

$$18) v^{\frac{5}{3}}$$

$$3) x^{\frac{41}{6}}$$

$$7) \frac{r^{\frac{2}{3}}}{r^3}$$

$$11) r^{\frac{9}{2}}$$

$$15) n^6$$

$$19) x^{\frac{17}{12}}$$

$$4) \frac{1}{x}$$

$$8) 1$$

$$12) k^{\frac{29}{12}}$$

$$16) r^3$$

$$20) x^{\frac{19}{3}}$$