

Hand In Assignment

Name: _____

Total: _____/20

Complete the following assignment on a separate sheet of paper.

Show ALL your work.

1. Classify each number as rational or irrational.

/3

a. $\sqrt{25}$

b. $-\sqrt{7}$

c. $\sqrt{\frac{4}{9}}$

2. Rewrite each mixed radical as an entire radical

/3

a. $3\sqrt{7}$

b. $2^3\sqrt{4}$

c. $2^4\sqrt{12}$

3. Simplify the following radicals:

/2

a. $\sqrt{40}$

b. $\sqrt[3]{48}$

4. Simplify leaving only positive exponents.

/12

a. $\left(\frac{-2x^{-3}}{3y^{-4}}\right)^{-2}$

b. $\frac{(3x^3y)(6xy^4)}{-9xy^2}$

c. $\frac{(-2s^{-2}t)(5s^{-3}t^2)}{4s^2t^{-3}}$

d. $\left(\frac{1}{27}\right)^{\frac{1}{3}}$

e. $-16^{-\frac{3}{4}}$

f. $\left(\frac{27}{125}\right)^{-\frac{2}{3}}$