

Name _____

Date _____

Mrs. Roumbos

Period _____

Take Home Quiz #4

Show all work where possible

Due: _____

[1] 1) What is the value $(-4)^3$	[2] 2) Write $0.\bar{7}$ as a <u>fraction</u> in simplest form
[2] 3) Simplify and leave your answer in <u>exponential form</u> : $\frac{10^{15}}{10^3}$	[2] 4) Simplify and leave your answer in <u>exponential form</u> : $6^5 \cdot 6^2$
[2] 5) Simplify and leave your answer in <u>exponential form</u> : $(x^4)^3$	[2] 6) Simplify and leave your answer in <u>fraction form</u> : 5^{-3}
[2] 7) What is 3.471×10^{-5} written in <u>standard form</u> ?	[2] 8) Write 86,400 in <u>scientific notation</u> .
[3] 9) What is the value of the expression below written in <u>scientific notation</u> ? $(4.7 \times 10^5) - (2.8 \times 10^4)$	[3] 10) What is the value of the expression below written in <u>scientific notation</u> ? $(2.5 \times 10^3) (3 \times 10^2)$

[3] 11) Solve the following: $y^2 = 64$

[3] 12) Solve the following: $x^3 = 216$

[2] 13) What is the value of: $\sqrt[3]{8}$

[2] 14) What is the value of: $\sqrt{225}$

[3] 15) Solve the following:

$$\frac{x-1}{3} = 6$$

[4] 16) Solve the following:

$$\frac{1}{2}x + \frac{1}{3}x - 20 = -10$$

[4] 17) Solve:

$$2(x+3) = x+10$$

[4] 18) Solve:

$$7x+8 = 4x+17$$

[2] 19) Is $\frac{4}{5}$ rational or irrational? Why?

[2] 20) Simplify $7x^2y$ when $x = 3$ and $y = 4$