

Math II – Rational Exponents

Name \_\_\_\_\_

$A^4 + 1 = 257$	$(B + 1)^4 = 81$	$(2C)^5 + 3 = 100$
$\sqrt{D - 4} = 3$	$\sqrt{E} + 7 = 15$	$\sqrt[3]{F} + 4 = 15$
$\sqrt[5]{2G - 30} = 3$	$H^{\frac{1}{5}} + 4 = 7$	$(I + 2)^{\frac{1}{7}} \cdot 3 = 12$
$J^{\frac{2}{5}} = 12$	$K^{\frac{3}{4}} + 5 = 12$	$3L^3 + 5L^3 = 400$

Match each letter with one of these answers:

- \_\_\_ 1.248...
- \_\_\_ 1.294...
- \_\_\_ 1.414...
- \_\_\_ 1.778...
- \_\_\_ 2 and -4
- \_\_\_ 2.770...
- \_\_\_ 3.684...
- \_\_\_ 4 and -4
- \_\_\_ 4.641...
- \_\_\_ 4.781...
- \_\_\_ 9
- \_\_\_ 13
- \_\_\_ 13.390...
- \_\_\_ 26.050...
- \_\_\_ 58.094...
- \_\_\_ 64
- \_\_\_ 136.5
- \_\_\_ 148.766...
- \_\_\_ 155.335...
- \_\_\_ 243
- \_\_\_ 357.470...
- \_\_\_ 498.830...
- \_\_\_ 509 and -515
- \_\_\_ 625
- \_\_\_ 1331
- \_\_\_ 16382

$2M^3 \cdot 5M^3 = 80$	$5 \cdot (N^3)^4 + 4 \cdot (N^2)^6 = 200$	$(\sqrt[3]{O + 3})^2 = 64$	$P^{\frac{1}{2}} + 5P^{\frac{1}{2}} = 18$
$10Q^{\frac{1}{4}} - 4Q^{\frac{1}{4}} = 30$	$R^{\frac{2}{4}}R^{\frac{1}{4}} = 44$	$S^{\frac{2}{4}}S^{\frac{3}{4}}S^{\frac{5}{4}} = 50$	$T^{\frac{1}{2}}T^{\frac{7}{10}} = 50$
$(U^{\frac{2}{3}})^{\frac{4}{5}} = 23$	$(V^{\frac{7}{3}}V^{\frac{10}{3}})^{\frac{2}{3}} = 47$	$\sqrt[4]{W^{\frac{2}{3}} + 1} = 2$	$\sqrt{X^{\frac{2}{3}}X^{\frac{7}{3}}} = 10$
$2Y^4 + 8 = 28$			$((Z + 1) \cdot 2)^{\frac{3}{4}} - 5 = 67$