

Jackson's GRE class on Udem

Questions - BASICS

Q1. Prime factorize 288

Q2. Prime factorize 512

Q3. Find HCF of 28,42,70

Q4. Find LCM of 28,42,70

Q5. A merchant has 120 liters of oil of one kind, 180 liters of another kind and 240 liters of a third kind. He wants to sell the oil by filling the three kinds of oil in tins of equal capacity. What should be the greatest capacity of such a tin? (NCERT Exemplar)

Q6. Three brands A, B and C of biscuits are available in packets of 12, 15 and 21 biscuits respectively. If a shopkeeper wants to buy an equal number of biscuits, of each brand, what is the minimum number of packets of each brand, he should buy? (NCERT Exemplar)

Q7. What type of number is $4 \times \pi$

Q8. True or False: Any addition / subtraction / Division / Multiplication operation involving Irrational numbers will result in an irrational number

Q9. Simplify $(-3)^4 \cdot (5/3)^5$
 $(2^6 \div 2^7)^3 \cdot 2^{-4}$

Q10.

Q11. $(3/4)^{-2} =$

Q12.

$$\left\{ \left(\frac{1}{3}\right)^{-3} - \left(\frac{1}{2}\right)^{-4} \right\} \div \left(\frac{1}{4}\right)^{-3} =$$

13. Simplify $4^{5/2}$

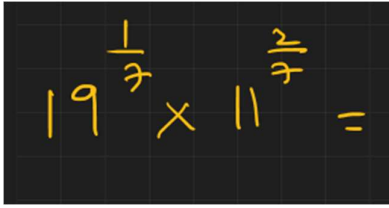
14.

$$3^{2/3} \cdot 3^{1/3} =$$

15.

$$\frac{1/2}{11} \div \frac{4/5}{11} =$$

16.



A handwritten mathematical expression on a dark grid background. The expression is $19^{\frac{1}{3}} \times 11^{\frac{2}{3}} =$. The numbers 19 and 11 are written in a large, bold, yellow font. The exponents $\frac{1}{3}$ and $\frac{2}{3}$ are written in a smaller, yellow font. A yellow 'x' symbol is used for multiplication, and a yellow '=' symbol is at the end of the expression.

Answers

1. $2^5 * 3^2$
2. 2^9
3. 14
4. 420
5. 60L
6. 35 packets of A, 28 packets of B and 20 packets of C
7. Irrational
8. False
9. $(5^5) / 3$
10. 2^{-7}
11. $16/9$
12. $11/64$
13. 32
14. 3
15. $1/[11^{(3/10)}]$
16. $2299^{(1/7)}$