IMPORTANT APTITUDE QUESTIONS

Q1.

What is $\dfrac{5+\sqrt{10}}{5\sqrt{5}-2\sqrt{20}-\sqrt{32}+\sqrt{50}}$ equals to.

$\sqrt{5}\times\sqrt{5}=5$

$\sqrt{10}=\sqrt{5\times2}$

$\sqrt{5}\times\sqrt{2}$

(a) 5 (b) $5\sqrt{2}$ (c) $5\sqrt{5}$ (d) $\sqrt{5}$

$\sqrt{25\times2}$

$5\sqrt{2}$

$2\sqrt{2\times2\times5}$

$2\times2\sqrt{5}$

$\sqrt{2\times2\times2\times2\times2}$

$2\times2\sqrt{2}$

$$\frac{5+\sqrt{10}}{5\sqrt{5}-4\sqrt{5}-4\sqrt{2}+5\sqrt{2}}$$

$$\frac{5+\sqrt{10}}{\sqrt{5}+\sqrt{2}}$$

$$\frac{5+\sqrt{5}\sqrt{2}}{\sqrt{5}+\sqrt{2}}$$

$$\frac{\sqrt{5}\times\sqrt{5}+\sqrt{5}\sqrt{2}}{\sqrt{5}+\sqrt{2}}$$

$$\frac{\sqrt{5}(\sqrt{5}+\sqrt{2})}{(\sqrt{5}+\sqrt{2})}=\sqrt{5}$$

IMPORTANT APTITUDE QUESTIONS

Q2. The digits in the unit place of the resulting number of expression

$(234)^{100} + (234)^{101}$?

A. 6 B. 4 C. 2 D. 0

$\Rightarrow (234)^{100} + (234)^{101}$

$6 + 4 = 10$ → 0

$(4)^{odd} = 4$

$(4)^{even} = 6$

$4^1 = 4$

$4^2 = 16$

$4^3 = 64$

$4^4 = 256$

IMPORTANT APTITUDE QUESTIONS

Q3. A man spends 75% of his income. His income is increased by 20% and he increased his expenditure by 10%. His savings are increased by .

a. 10% b. 25% c. 37.5% d. 50%

75 + 7.5 = 82.5

Man Income / 100 − Exp / 75 = Saving / 25

×120 ↓ ↓ 12.5

120 − 82.5 = 37.5

50% ↑

75 × 10 / 100 = 7.5

37.5 / 25 / 12.5

25 / 2 = 12.5

IMPORTANT APTITUDE QUESTIONS

Q4. A sum of Rs.5000 is divided into two parts such that the first part is invested at 4%p.a and the second part at 5% p.a simple interest. The total interest earned from both the investment after one year is rs235. find the amount invested in first part.

a.1200 b.1500 c.1000 d.1800

$S.I = \frac{P \times R \times T}{100}$

5000 → x (4%), $5000 - x$ (5%)

1500

$\frac{x \times 4}{100} + \frac{(5000 - x) \times 5}{100} = 235$

$4x + 25000 - 5x = 23500$

$x = 25000 - 23500 = 1500$

Alligation

4% 5%

4.7%

0.3 0.7

3 : 7 = 10

$5000 \times \frac{3}{10} = 1500$

$235 = \frac{5000 \times r}{100}$

4.7%

IMPORTANT APTITUDE QUESTIONS

Q5. If a, b and c are the sum of the factors of the numbers 25, 36 and 48 respectively, then the value of (a + b) C is

a. 19235

b. 17864

c. 15128

d. 13634

$a = 25 = \{1, 5, 25\} = 1+5+25 = 31$

$b = 36 = \{1, 2, 3, 4, 6, 9, 12, 18, 36\} = 91$

$c = 48 = \{1, 2, 3, 4, 6, 8, 12, 16, 24, 48\} = 124$

25 30 36 91

30 70 54

$(a+b) \times c$

$= (31+91) \times 124$

122×124

$=$

8

IMPORTANT APTITUDE QUESTIONS

Q6.

Numerical Ability

Question No. 4

If $2\frac{1}{4} \div \left\{1\frac{1}{4} - x\left(\frac{3}{4} \div \frac{2}{3} \text{ of } \frac{9}{5}\right)\right\} = \frac{3}{20}$, then what is the value of x?

- 16
- −18
- −22
- 22

$\frac{9}{4} \div \left\{\frac{5}{4} - x\left(\frac{3}{4} \div \frac{2}{3} \times \frac{9}{5}\right)\right\} = \frac{3}{20}$

$\frac{9}{4} \div \left\{\frac{5}{4} - x\left(\frac{3}{4} \times \frac{5}{9}\right)\right\} = \frac{3}{20}$

BODMAS

$\frac{3}{5} = \frac{3}{5}$

$\frac{9}{4} \div \left\{\frac{5}{4} - \frac{5x}{8}\right\} = \frac{3}{20}$

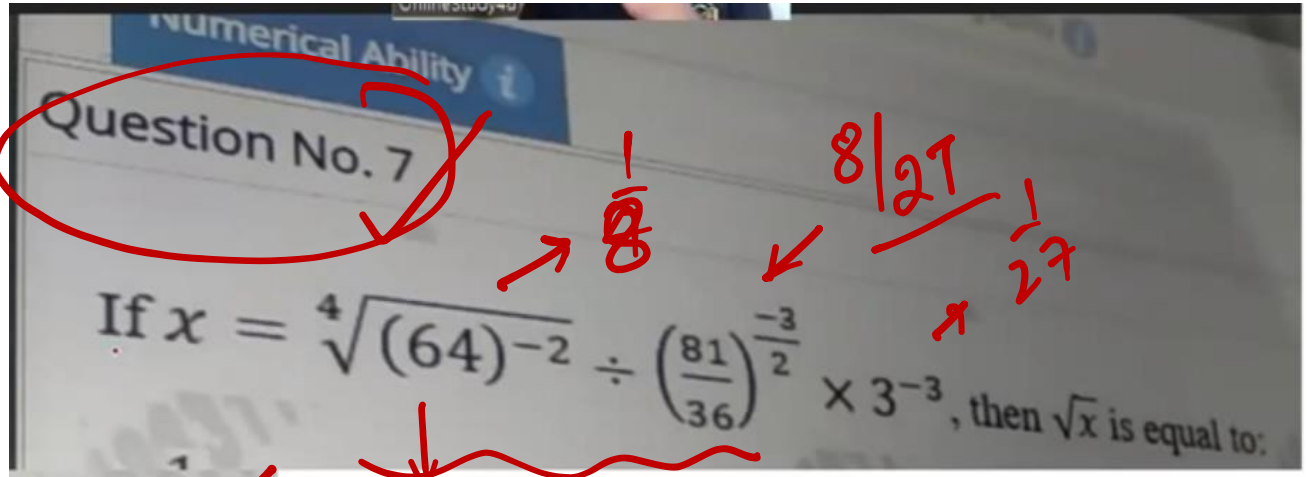
$\frac{9}{4} \div \left\{\frac{10-5x}{8}\right\} = \frac{3}{20}$

$\frac{9}{4} \times \frac{8}{(10-5x)} = \frac{3}{20}$

$10 - 5x = 120$

$-5x = 110$

$x = -22$ ✓



$\sqrt[4]{\frac{1}{(64)^2}}$

$= \sqrt[4]{\frac{1}{64 \times 64}}$

$\sqrt[4]{\frac{1}{8 \times 8 \times 8 \times 8}}$

$\frac{1}{8}$

$\left(\frac{9}{4}\right)^{-3/2}$

$\left(\left(\frac{9}{4}\right)^{3/2}\right)^{-1}$

$\left(\left(\frac{3}{2}\right)^{2 \times 3/2}\right)^{-1}$

$\left(\frac{27}{8}\right)^{-1}$

$\frac{8}{27}$

E

$a^{-1} = \frac{1}{a}$ ✓ $\frac{1}{a} = a^{-1}$

$\sqrt{25} = \sqrt{5 \times 5} = 5$

$\frac{8}{27}$ ✓ $a^{-x} = \frac{1}{a^x}$

$(a^x)^y = a^{xy}$

$3^{-3} = (3^3)^{-1}$

$27^{-1} = \frac{1}{27}$

$\frac{1}{8} \times \frac{27}{8} \times \frac{1}{27}$

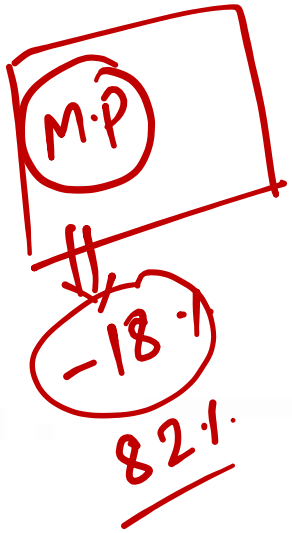
$\sqrt{\frac{1}{64}} = \sqrt{x}$

$\sqrt{x} = \frac{1}{8}$

IMPORTANT APTITUDE QUESTIONS

Q8. The selling price of an item, after offering 18% discount on its marked price was Rs.287. What was the marked price of the item in rs.

a. 300
b. 400
c. 350
d. 325



$$MP \times \frac{82}{100} = 287$$

$$\left(\frac{100-18}{100}\right)$$

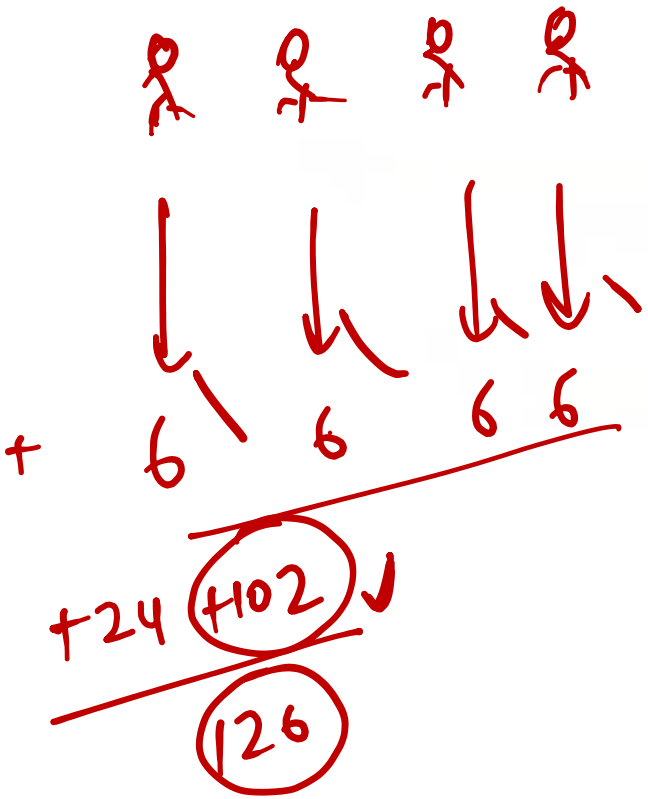
$$MP = \frac{287 \times 100}{82} = 350$$

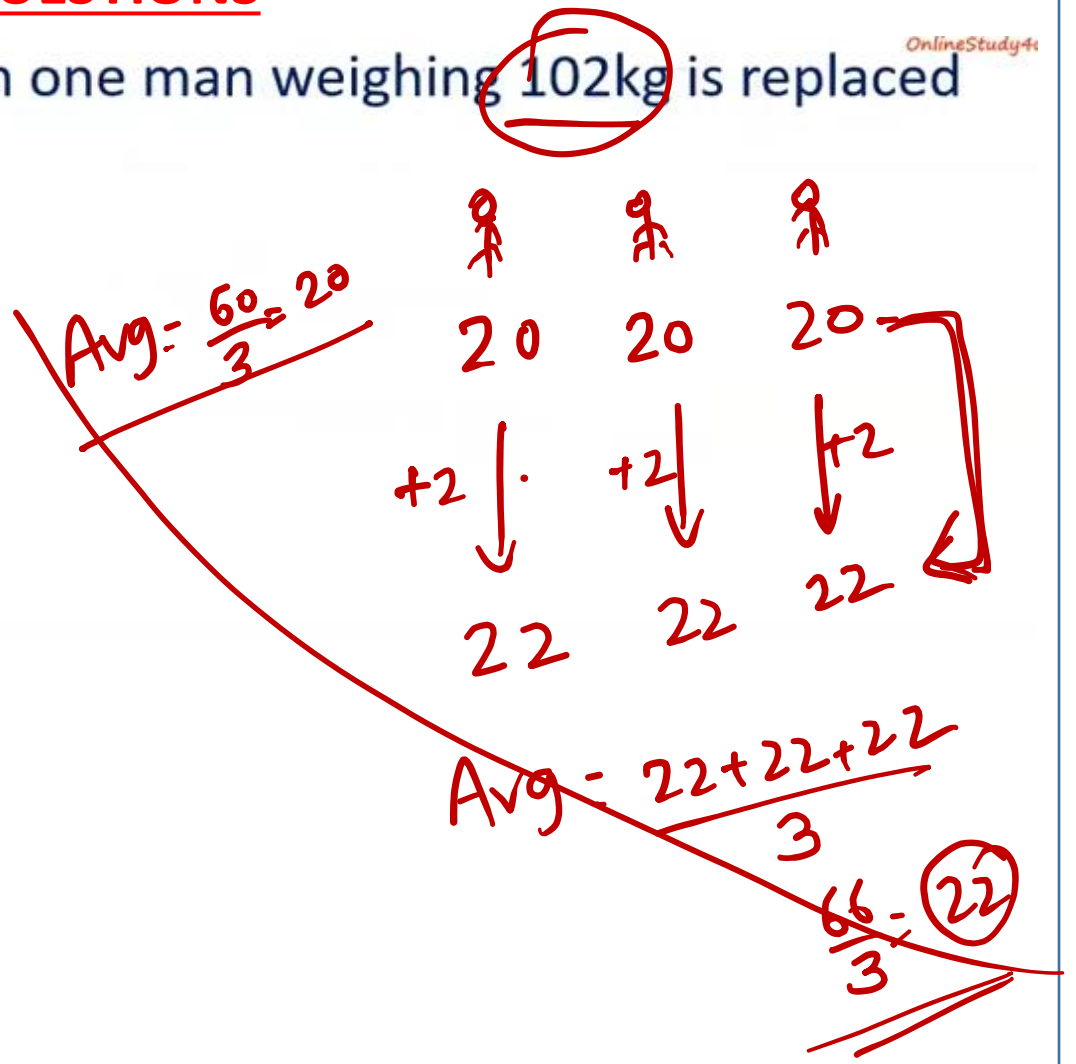
$$82 \overline{)287} \ (3.5$$
$$246$$
$$410$$
$$410$$

IMPORTANT APTITUDE QUESTIONS

Q9. The average weight of 4 men increases by 6kg when one man weighing 102kg is replaced by another man. What is the weight of the new man ?

- 126kg
- 120kg
- 128kg
- 122kg





IMPORTANT APTITUDE QUESTIONS

Q9. The average cost of articles P,Q,R and S is 204, the average of P, Q is Rs.102 and the average of Q and R is Rs.132. If the cost of the article Q is the average of P and R. then the average cost of articles Q and S is ?.

- Rs. 204
- Rs. 264
- Rs. 234
- Rs. 291

$Avg = \frac{Sum}{NO}$

$204 = \frac{P+Q+R+S}{4}$

$P+Q+R+S = 816$ ✓

$Q+S = 816-224$

$Q+S = 592$

$\frac{Q+S}{2} = \frac{592}{2} = 296$

$P+Q = 102 \times 2 = 204$

$Q+R = 132 \times 2 = 264$

$P+2Q+R = 468$ ✓

$P+P+R+R = 468$

$2P+2R = 468$

$P+R = 234$ ✓

$Q = \frac{P+R}{2}$

$2Q = P+R$