

Q 1

Date

14 cows eat 63 kg grass in 18 days. How many cows will eat 770 kg grass in 28 days?

Sol

Cows	grass	days
↑ 14	↓ 63	↓ 18
x	↓ 770	↓ 28

$$\frac{x}{14} = \frac{63}{770} \times \frac{18}{28}$$

$$\frac{x}{14} = \frac{1134}{21560} \Rightarrow x = \frac{1134 \times 14}{21560}$$

~~$$x = \frac{15876}{21560}$$~~

$$x = 0.7 \approx 1$$

\therefore Appox 1 cow can eat 770 kg grass in 28 days!

Q2

Date

A factory manufactures 560 fans in 7 days with 20 machines. How many fans would be manufactured in 12 days with 18 machines.

Sol.

Fans	Days	Machines
↑ 560	↑ 7	↑ 20
x	12	18

$$\frac{x}{560} = \frac{12}{7} \times \frac{18}{20}$$

$$\frac{x}{560} = \frac{108}{70} \Rightarrow \frac{108 \times 56}{70}$$

$$x = 864$$

∴ 864 fans can be manufactured in 12 days with 18 machines.

Q3

The price of 80 shirts is Rs. 22000. What will be price of 30 shirts?

80

$$80 : 22000 :: 30 : x$$

$$\frac{80}{22000} = \frac{30}{x} \Rightarrow \underline{80x} = 30 \times 22000$$

$$80x = 30 \times 22000$$

$$80x = 660,000$$

$$x = \frac{660,000}{80}$$

$$\boxed{x = 8,250}$$

\therefore 30 shirts will be Rs. 8,250/-
price of

Q4

Date

a) Hamza spends 20% of his total income on house rent, 70% on domestic expenditure. If his savings is Rs. 1800. What will be his total income?

Sol,

Let the income of Hamza is x

expenses = 20% + 70% = 90%

~~$x - \frac{90}{100}(x) = 1800$~~

~~L.C.M~~

~~$\frac{100x - 90x}{100} = 1800$~~

~~$\frac{10x}{100} = 1800$~~

~~$x = 1800 \times 10$
 $x = 18000$~~

∴ Hamza's income is Rs. 18000/-

$18000 - \left(\frac{90}{100}(18000)\right) = 1800$

$18000 - 16200 = 1800$

1800 = 1800 proved

Q4

Date _____

b) Change into fractions 70%

$$\frac{70}{100} \quad \text{OR} \quad \frac{7}{10} \quad \text{Ans}$$

c) Find 15% of 600

let x is 15% of 600

$$600 \times \frac{15}{100} = x$$

$$x = \frac{600 \times 15}{100}$$

$$x = 6 \times 15$$

$$x = 90$$

 \therefore 15% of 600 is 90

Q5 which fraction is larger

$$\frac{7}{9}, \frac{1}{4}, \frac{13}{36}$$

Sol Equate the numerators

$$\frac{7}{9} \times \frac{13}{13} \quad , \quad \frac{1}{4} \times \frac{91}{91} \quad , \quad \frac{13}{36} \times \frac{7}{7}$$

$$\frac{91}{117} \quad , \quad \frac{91}{364} \quad , \quad \frac{91}{252}$$

∴ Numerators are equal so fraction with smallest denominator will be the larger.

$$\frac{91}{117} \Rightarrow \frac{7}{9} \text{ Ans}$$

Q6 Solve

$$(7)^2 + x - (2 \times 4) \div 2$$

$$49 + x - 8 \div 2$$

$$49 + x - 4$$

$$\boxed{45 + x}$$

Ans