

Rwp-44

29818 - Aqsa Grfam - 044

Assignment: GSA

Question 1. 14 cows eat 63kg grass in 18 days. How many cows will eat 770kg grass in 28 days?

Answer:

According to the given condition:

Grass	Days	Cows
↑ 63	↓ 18	↑ 14
770	↓ 28	x

So:

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

$$x = 7.85 \times 14$$

$$x = 109.90$$

$$x = 110$$

$$\text{Cows} = 110$$

Question 2. A factory manufactures 560 fans in 7 days with 20 machines. How many fans would be manufactured in 12 days with 18 machines?

Solution:

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

$$\frac{x}{560} = \frac{18}{20} \times \frac{3}{7}$$

$$x = \frac{18}{8} \times \frac{3}{7} \times 560$$

$$x = 864 \text{ fans}$$

Question 3. The price of 80 shirts is Rs. 22000. What will be the price of 30 shirts?

Solution:

Let the price of 30 shirts be x.

According to the given condition:

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

So:

$$\frac{80}{30} = \frac{22000}{x}$$

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

$$x = 8250$$

Price of 30 shirts = Rs. 8250

QNO: 4.

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

Solution:

Let the total income be x .

Spent on house rent = 20% x

$$= \frac{20}{100} x$$

Spent on domestic exp. = 70% x

$$= \frac{70}{100} x$$

$$\text{Savings} = 1800$$

$$\text{House rent} + \text{D. Exp.} + \text{Savings} = 100\%$$

$$20\% + 70\% + \text{Savings} = 100\%$$

$$90\% + \text{Savings} = 100\%$$

$$\text{Savings} = 100 - 90$$

$$= 10\%$$

Applying formula:

$$\% \text{ age of savings} = \frac{\text{Savings}}{\text{Total income}} \times 100$$

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

$$x = \frac{180000}{10}$$

$$x = 18000$$

Total income = Rs. 18000

(b)

Change into fractions; 70%

$$70\% = \frac{70}{100}$$

$$= \frac{7}{10}$$

The fraction form of 70% is $\frac{7}{10}$

(c)

Find 15% of 600.

According to the given condition:

$$15\% (600)$$

$$= \frac{15}{100} \times 600 = 90$$

So, 15% of 600 is 90

QNO: 4

(a)

which fraction is larger in the following?

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

Solution:

Given fractions are:

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

Multiplying ~~the~~ ~~denominators~~ ~~with~~ ~~the~~ with suitable number to get equal denominators:

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

$$\frac{28}{36}, \frac{9}{36}, \frac{13}{36}$$

∴ larger the numerator, larger is the fraction. So:

$$\frac{28}{36} = \frac{7}{9}$$

$\frac{7}{9}$ is larger.

(b)

Solve:

i):

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

$$= (7 \times 7) + x - 8 + 2$$

$$= 49 + x - 8 + 2$$

$$x = 8 - 49 - 2$$

$$x = 8 - 51$$

$$x = -43$$

ii)

$$9 + 3 + 3 \times 2$$

$$= 9 + 3 + 6$$

$$= 18$$

iii)

$$(x^2)^3 = ?$$

$$x^{2 \cdot 3} = x^6$$

iv)

$$x^a \cdot x^b = ?$$

$$x^a \cdot x^b = x^{a+b}$$

$$= x^{a+b}$$

(v)

Convert into meter: 10 cm

As we know:

$$1 \text{ m} = 100 \text{ cm}$$

So:

$$10 \text{ cm} = \frac{10}{100} \text{ m}$$

$$= 0.1 \text{ m}$$

Q.P.

10 cm

10 cm

10 cm

(vi):

$$\frac{x^{a+b}}{x^{c-d}} = ?$$

$$\frac{x^{a+b}}{x^{c-d}} = x^{a+b} \cdot x^{-c+d}$$

$$= x^{a+b+d-c}$$

$$= x^{a+b-c+d}$$