

Q6

Day: _____

Date: _____ Working

a. Apple, Berry, Cherry, Date
 $3 : 6 : 2 : 5$

$$\text{Total} = x$$

$$\text{Apple} = \frac{3}{3+6+2+5} x$$

$$\text{Apple} = \frac{3}{16} x$$

$$\text{Berry} = \frac{6}{16} x = \frac{3}{8} x$$

$$\text{Cherry} = \frac{2x}{16} = \frac{1}{8} x$$

$$\text{Date} = \frac{5x}{16}$$

$$\text{Apple} = 35 + \frac{5x}{16}$$

$$\frac{3x}{16} = 35 + \frac{5x}{16}$$

$$\frac{3x}{16} = \frac{560 + 5x}{16}$$

$$48x = 8960 + 80x$$

$$\frac{560 + 5x}{16} = \frac{3x}{16}$$

$$\frac{3x}{16} - 35 = \frac{5x}{16}$$

$$\frac{3x}{16} - 560 = \frac{5x}{16}$$

$$3x - 8960$$

→ The Ratio is wrong if apple exceeds Dates why in ratio it is 1:2

Pay: _____

Q6.

Date: _____

b. Price = \$200

discount = 25%

$$\text{discount price} = 200 \times \left(\frac{100 - 25}{100} \right)$$

$$= 200 \times \frac{75}{100}$$

$$= \$150$$

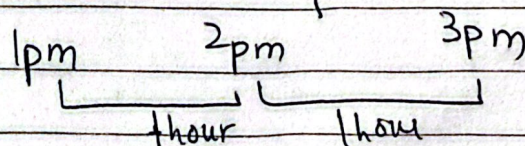
$$\text{Tax inclusive price} = 150 \times \left(\frac{100 + 6}{100} \right)$$

$$= 150 \times \frac{106}{100}$$

$$= \frac{1590}{10} = \$159$$

$$\text{Total amount paid} = \boxed{\$159}$$

$$\text{c. time} = \frac{d}{s} = \frac{36}{18} = 2 \text{ hours}$$



reach time = 3pm

d. Unscramble

~~i-statist~~

i- STATISTICS

ii- GAMBLER

Q7.

Date: _____

$$c. (i) \quad 2, 6, 18, 54, 162, 486$$

$$\quad \quad \quad \times 3 \quad \times 3 \quad \times 3 \quad \times 3 \quad \times 3$$

= All numbers fit

$$(ii) \quad 3, 5, 7, 11, 13, 15$$

$$\quad \quad \quad +2 \quad +2 \quad +4 \quad +2 \quad +2$$

Answer = 15

b. Total Savings = 25000

$$\text{Smallest share} = \frac{1}{\frac{15}{3}} \times \frac{5000}{25000}$$

$$= 1666.7 \text{ Rs.}$$

$$\begin{array}{r} 1666.66 \\ 3 \overline{) 5000} \\ \underline{3} \\ 20 \\ \underline{18} \\ 20 \\ \underline{18} \\ 20 \\ \underline{18} \\ 20 \\ \underline{18} \end{array}$$

$$a. \text{ Volume of Sphere} = \frac{4}{3} \pi r^3$$

working

$$\text{radius} = \frac{14}{2} = 7$$

$$7^3 = 7 \times 7 \times 7$$

$$= 49 \times 7 = 343$$

$$4 \times 22 \times 343 = 30184$$

$$= \frac{4}{3} \times \frac{22}{7} \times 7^3$$

$$= \frac{4}{3} \times \frac{22}{7} \times \frac{343}{1}$$

$$= \frac{30184}{3}$$

$$= 10061.33 \text{ cm}^3$$

Q7.

Day:

Date:

d. 5cm, 12cm, 13cm

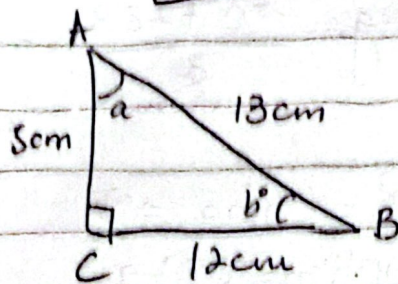
Pythagoras to check if right angle triangle.

$$(\text{Hyp})^2 = 5^2 + 12^2$$

$$13^2 = 25 + 144$$

$$\sqrt{13^2} = \sqrt{169}$$

$$13 = 13$$



$$1 \text{ angle} = 90^\circ$$

$$\tan B = \frac{5}{12}$$

$$B = \tan^{-1}\left(\frac{5}{12}\right)$$

$$\tan A = \left(\frac{12}{5}\right)$$

$$A = \tan^{-1}\left(\frac{12}{5}\right)$$