

$$2) \text{ Interest} = \frac{PRT}{100}$$

$$= \frac{162 \times 3 \times 12}{100} = \frac{5832}{100} = 58.32$$

$$3) \text{ Let the sum} = 100$$

$$\text{Amount} = 100 \times 2 = 200$$

$$\text{Interest} = 200 - 100 = 100$$

$$\text{Rate} = \frac{100 \times 100}{200 \times 3} = \frac{25}{3} = 8\frac{1}{3}\%$$

$$4) \text{ Let the sum} = 100$$

$$\text{Amount} = 200$$

$$\text{Interest} = 100$$

$$\text{Rate} = 5\%$$

$$\text{Time} = \frac{100 \times 100}{200 \times 5} = 10 \text{ years}$$

$$5) \text{ Interest given by Roh} = \frac{4000 \times 15 \times 7}{100} = ₹2100$$

$$\text{Interest given by Rob} = \frac{4000 \times 15 \times 8}{100} = ₹1500$$

$$\text{Difference in interest} = ₹2100 - ₹1500$$

$$= ₹600$$

$$\text{Ken's interest on lending} = \frac{23000 \times 10 \times 3}{100}$$

$$= 7900$$

$$\text{Mike's interest on borrowing} = \frac{23000 \times 12 \times 3}{100}$$

$$= 71080$$

$$= 7(1080 - 900)$$

$$= 7180$$

Q. vi

$$\text{1st Part} = x$$

$$\text{2nd Part} = 1750 - x$$

1st part \rightarrow 2 yrs 15%

$$\text{Interest} = \frac{x \times 15 \times 2}{100} = \frac{3x}{10}$$

$$\text{2nd Part} = 1750 - x$$

Time = 3 yrs, Rate of Interest = 16% per annum

$$\text{Interest on 2nd part} = \frac{(1750 - x) \times 16 \times 3}{100}$$

$$= \frac{(1750 - x) \times 12}{25}$$

$$= \frac{1750 \times 12 - 12x}{25}$$

$$= \frac{1750 \times 12}{25} - \frac{12x}{25}$$

$$= 840 - \frac{12x}{25}$$

$$\text{Total interest} = \frac{3x}{10} + \left(840 - \frac{12x}{25}\right)$$

$$= \frac{3x}{10} + 840 - \frac{12x}{25}$$

$$= 840 + \left(\frac{3x}{10} - \frac{12x}{25}\right)$$

$$= 840 + \left(\frac{15x - 24x}{50}\right)$$

$$= 840 + \left(-\frac{9x}{50}\right) = 840 - \frac{9x}{50}$$

Given, total interest = 624

$$\Rightarrow 840 - \frac{9x}{50} = 624$$

$$\Rightarrow \frac{9x}{50} = 840 - 624 = 216$$

$$\Rightarrow x = \frac{216 \times 50}{9} = 24 \times 50 = 1200$$

$$\Rightarrow 1750 - x = 1750 - 1200 = 550$$

8) Time = 15 + 30 + 31 + 31 + 30 + 9

$$= 146 \text{ days}$$
$$= \frac{146}{30} = 2 \frac{16}{30}$$

Simple Interest = $\frac{200}{100} \times 10 \times 73$

$$= ₹1460$$

$$P = 2100$$

$$R = 5\% \text{ per annum}$$

$$T = 16 \text{ months}$$

$$= \frac{16}{12} \text{ years}$$

$$= \frac{4}{3} \text{ years}$$

$$\text{Interest} = \frac{PRT}{100}$$

$$= \frac{2100 \times 5 \times \frac{4}{3}}{100}$$

$$= ₹140$$

$$\text{Interest} = ₹140$$

$$\text{Rate} = 6\frac{1}{4}\% \text{ per annum}$$

$$= \frac{25}{4}\% \text{ per annum}$$

$$\text{Time} = 2 \text{ years}$$

$$\text{Principal} = \frac{I \times 100}{RT}$$

$$= \frac{140 \times 100}{25 \times 2}$$

$$= \frac{140 \times 100}{25 \times 2}$$

$$= \frac{140 \times 100 \times 4}{25 \times 2}$$

$$= ₹120$$

$$11) A \text{ in 2 years} = ₹ 2200$$

$$A \text{ in 4 years} = ₹ 2800$$

$$SI \text{ in 2 years} = ₹ 2800 - ₹ 2200 \\ = ₹ 600$$

$$\text{Principal} = ₹ 2200 - ₹ 600 \\ = ₹ 1600$$

$$15 \text{ Rate of Interest} = \frac{₹ 600 \times 100}{1600 \times 2} = \frac{75}{4} \\ = 18 \frac{3}{4} \%$$

$$20 \text{ } 10) \text{ Let } P \text{ be } 100$$

$$A = \frac{₹}{4} \times 100$$

$$= 175 \Rightarrow SI = 175 - 100 = 75$$

$$25 \text{ } R = \frac{12\%}{2} = \frac{25\%}{2}$$

$$T = \frac{1 \times 100}{P \times R}$$

$$= \frac{75 \times 100}{100 \times \frac{25}{2}}$$

$$30 \text{ } = \frac{75^3}{100 \cdot 25} \times \frac{100}{25} \times 2 = 6 \text{ years}$$