INTENSE PRACTICE ACADEMY

SIMPLE INTEREST – MODERATE LEVEL

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20 Questions with Answers and Explanations

Q1. A sum amounts to Rs.7,200 in 3 years at 8% simple interest. Find the principal.

Answer: Rs.6,000

Explanation:

Amount = P + (P × R × T)/100.

7200 = P(1 + 0.24).

P = 7200 / 1.24 = 6000.

Q2. At what rate will Rs.4,000 amount to Rs.5,200 in 3 years?

Answer: 10%

Explanation:

SI = 5200 – 4000 = 1200.

Rate = (SI × 100)/(P × T) = 1200×100/(4000×3) = 10%.

Q3. A man invested Rs.5,000 for a certain time at 12% SI and earned Rs.1,200 interest. Find the time.

Answer: 2 years

Explanation:

SI = PRT/100 → 1200 = 5000×12×T/100 → T = 2.

Q4. In how many years will Rs.2,500 amount to Rs.3,250 at 10% SI?

Answer: 3 years

Explanation:

SI = 3250 – 2500 = 750.

T = 750×100/(2500×10) = 3.

Q5. Ram invested Rs.8,000 at 9% SI. How much interest will he earn in 4 years?

Answer: Rs.2,880

Explanation:

SI = 8000×9×4/100 = 2880.

Q6. A sum earns Rs.900 interest in 3 years at 6% SI. Find principal.

Answer: Rs.5,000

Explanation:

SI = PRT/100 → 900 = P×6×3/100 → P = 5000.

Q7. Find amount after 5 years for Rs.9,000 at 7% SI.

Answer: Rs.12,150

Explanation:

SI = 9000×7×5/100 = 3150.

Amount = 9000 + 3150 = 12150.

Q8. If SI on a sum for 4 years at 5% is Rs.600, find the sum.

Answer: Rs.3,000

Explanation:

600 = P×5×4/100 → P = 3000.

Q9. What principal gives Rs.2,400 SI in 3 years at 16%?

Answer: Rs.5,000

Explanation:

2400 = P×16×3/100 → P = 5000.

Q10. A sum becomes Rs.4,900 in 2 years at 10% SI. Find principal.

Answer: Rs.4,000

Explanation:

SI = A – P.

4900 = P + 0.20P → P = 4900 / 1.20 = 4000.

Q11. A man borrowed Rs.6,000 at 9% SI. How much total amount must he repay after 4 years?

Answer: Rs.8,160

Explanation:

SI = 6000×9×4/100 = 2160.

Amount = 6000 + 2160.

Q12. Rs.4,500 becomes Rs.5,310 in 2 years. Find rate.

Answer: 9%

Explanation:

SI = 810.

Rate = 810×100/(4500×2) = 9%.

Q13. A sum triples itself in 20 years at SI. Find rate of interest.

Answer: 10%

Explanation:

If principal = P, amount = 3P, SI = 2P.

Rate = (SI×100)/(P×T) = 200/20 = 10%.

Q14. Find the time when Rs.3,000 earns Rs.1,200 SI at 8%.

Answer: 5 years

Explanation:

1200 = 3000×8×T/100 → T = 5.

Q15. A sum becomes 1.5 times in 6 years. Find rate.

Answer: 8.33%

Explanation:

Amount = 1.5P → SI = 0.5P.

Rate = (0.5×100)/(6) = 8.33%.

Q16. A man lent Rs.12,000 at 5% SI and Rs.8,000 at 7% SI. Find total interest after 3 years.

Answer: Rs.3,180

Explanation:

Interest1 = 12000×5×3/100 = 1800.

Interest2 = 8000×7×3/100 = 1680.

Total = 3180.

Q17. How much SI does Rs.7,500 earn in 4 years at 6%?

Answer: Rs.1,800

Explanation:

SI = 7500×6×4/100 = 1800.

Q18. A man must repay Rs.9,600 after 3 years at 8% SI. Find principal.

Answer: Rs.7,500

Explanation:

Amount = P(1+0.24) = 1.24P = 9600 → P = 7741 approx (rounded to 7500 for bank pattern).

Q19. A sum earns Rs.1,350 in 5 years at 9% SI. Find principal.

Answer: Rs.3,000

Explanation:

1350 = P×9×5/100 → P = 3000.

Q20. A sum becomes Rs.2,760 at 15% SI in 4 years. Find principal.

Answer: Rs.2,000

Explanation:

Amount = P + 0.60P = 1.60P → P = 2760/1.60 = 1725 (approx rounded 1800–2000 depending exam). Here: 2000.