Practice Questions for Interest

|  |  |
| --- | --- |
| Question | Mr. Thomas invested an amount of Rs. 13,900 divided in two different schemes A and B at the simple interest rate of 14% p.a. and 11% p.a. respectively. If the total amount of simple interest earned in 2 years be Rs. 3508, what was the amount invested in Scheme B |
| Option A | Rs. 6400 |
| Option B | Rs. 6500 |
| Option C | Rs. 7200 |
| Option D | Rs. 7500 |
| Answer | Option **A** |
| Explanation | Let the sum invested in Scheme A be Rs. *x* and that in Scheme B be Rs. (13900 - *x*).   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Then, | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | *x* x 14 x 2 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | + | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | (13900 - *x*) x 11 x 2 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | = 3508 | | 100 | 100 |   http://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif 28*x* - 22*x* = 350800 - (13900 x 22)  http://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif 6*x* = 45000  http://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif *x* = 7500.  So, sum invested in Scheme B = Rs. (13900 - 7500) = Rs. 6400. |

|  |  |
| --- | --- |
| Question | A lent Rs.5000 to B for 2 years and Rs. 3000 to C for 4 years on simple interest at the same rate of interest and received Rs.2200 in all from both of them as interest. The rate of interest per annum is |
| Option A | 5% |
| Option B | 7% |
| Option C | 8% |
| Option D | 10% |
| Answer | Option D |
| Explanation | |  | | --- | | Let the rate be R% p.a. | | Then, | (5000xRx2/100) + (3000xRx4/100) | | **‹=›100R+120R= 2200** | | **‹=›R=(2200/220)** | | Rate **‹=›10%.** | |

|  |  |
| --- | --- |
| Question | What will be the ratio of simple interest earned by certain amount at the same rate of interest for 6 years and that for 9 years? |
| Option A | 1:3 |
| Option B | 1:4 |
| Option C | 2:3 |
| Option D | Data inadequate |
| Answer | Option **C** |
| Explanation | let the principal be P and rate of interest be R%.   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | http://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif Required ratio = | |  |  |  | | --- | --- | --- | | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | P x R x 6 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | | 100 | | = | 6PR | = | 6 | = 2 : 3. | | |  |  |  | | --- | --- | --- | | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | P x R x 9 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | | 100 | | 9PR | 9 | |

|  |  |
| --- | --- |
| Question | A sum fetched a total simple interest of Rs. 4016.25 at the rate of 9. p.c.p.a in 5 years. What is the sum? |
| Option A | [Rs.4462.50](http://www.a2zinterviews.com/Aptitude/simple-interest/problems-on-simle-interest_1.php#t1) |
| Option B | **Rs.8032.50** |
| Option C | **Rs.8900** |
| Option D | **Rs.8925** |
| Answer | Option D |
| Explanation | |  |  | | --- | --- | | Principal | = Rs. (100×4016.25 / 9×5) | | ‹=› Rs. (401625/45) | | **‹=› Rs. 8925.** | |

|  |  |
| --- | --- |
| Question | The simple interest on Rs. 1820 from march 9, 2003 to may 21, 2003 at 7x1/2% rate will be |
| Option A | [Rs.22.50](http://www.a2zinterviews.com/Aptitude/simple-interest/problems-on-simle-interest_4.php#t1) |
| Option B | Rs.27.30 |
| Option C | Rs.28.80 |
| Option D | Rs.29 |
| Answer | Option B |
| Explanation | |  |  | | --- | --- | | Time | = (22+30+21) days | | **‹=›**73 days. | | **‹=›** 1/5 year. | | S.I | = Rs. (1820×15/2×1/5×1/100) | | **‹=›Rs. 27.30.** | |

|  |  |
| --- | --- |
| Question | On a sum of money, the simple interest for 2 years is Rs.660, while the compound interest is Rs.696.30, the rate of interest being the same in both the cases. The rate of interest is |
| Option A | 10% |
| Option B | 11% |
| Option C | 12% |
| Option D | 10.5% |
| Answer | Option B |
| Explanation | |  |  | | --- | --- | | **Difference in C.I and S.I for 2 years** | = Rs(696.30-660) | | =Rs. 36.30. | | **S.I for one years** | = Rs330. | | **S.I on Rs.330 for 1 year** | =Rs. 36.30 | | **Rate** | = (100x36.30/330x1)% | | =11%. | |

|  |  |
| --- | --- |
| Question | The least number of complete years in which a sum of money put out at 20% compound interest will be more than doubled is: |
| Option A | 3 |
| Option B | 4 |
| Option C | 5 |
| Option D | 6 |
| Answer | Option **B** |
| Explanation | |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | P | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 1 + | 20 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | *n* | > 2P | http://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 6 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | *n* | > 2. | | 100 | 5 |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Now, | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 6 | x | 6 | x | 6 | x | 6 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | > 2. | | 5 | 5 | 5 | 5 |   So, *n* = 4 years. |

|  |  |
| --- | --- |
| Question | What will be the compound interest on a sum of Rs.25,000 after 3 years at the rate of 12 p.c.p.a? |
| Option A | [Rs.9000.30](http://www.a2zinterviews.com/Aptitude/compound-interest/objective-type-question-for-compound-interest_3.php#t1) |
| Option B | [Rs.9270](http://www.a2zinterviews.com/Aptitude/compound-interest/objective-type-question-for-compound-interest_3.php#t1) |
| Option C | Rs. 10123.20 |
| Option D | Rs. 10483.20 |
| Answer | Option C |
| Explanation | |  |  | | --- | --- | | **Amount** | = Rs.(25000x(1+12/100)³ | | =Rs.(25000x28/25x28/25x28/25) | | = Rs. 35123.20. | | **C.I** | =Rs(35123.20-25000) | | =Rs.10123.20. | |

|  |  |
| --- | --- |
| Question | If the simple interest on a sum of money for 2 years at 5% per annum is Rs. 50, what is the compound interest on the same at the same rate and for the same time? |
| Option A | Rs. 51.25 |
| Option B | Rs. 52 |
| Option C | Rs. 54.25 |
| Option D | Rs. 60 |
| Answer | Option **A** |
| Explanation | |  |  |  |  |  | | --- | --- | --- | --- | --- | | Sum = Rs. | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 50 x 100 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | = Rs. 500. | | 2 x 5 |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Amount | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | = Rs. | http://www.indiabix.com/_files/images/aptitude/1-sym-obracket-h2.gif | 500 x | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 1 + | 5 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | 2 | http://www.indiabix.com/_files/images/aptitude/1-sym-cbracket-h2.gif | | 100 | | |  | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | = Rs. | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 500 x | 21 | x | 21 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | | 20 | 20 | | |  | = Rs. 551.25 |   http://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif C.I. = Rs. (551.25 - 500) = Rs. 51.25 |

|  |  |
| --- | --- |
| Question | The compound interest on Rs.30,000 at 7% per annum is Rs.4347. The period (in years) is |
| Option A | 2 |
| Option B | [2½](http://www.a2zinterviews.com/Aptitude/compound-interest/objective-type-question-for-compound-interest_3.php#t1) |
| Option C | 3 |
| Option D | 4 |
| Answer | Option A |
| Explanation | |  |  | | --- | --- | | **Amount** | =Rs(30000 + 4347) | | = Rs.34347. | | Let the time be n years. |  | | **Then, 30000(1+7/100)^n** |  | | = 34347. | | =34347/3000 | | =11449/1000 | | =(107/100)^n | | n= 2years. | |

|  |  |
| --- | --- |
| Question | Albert invested an amount of Rs. 8000 in a fixed deposit scheme for 2 years at compound interest rate 5 p.c.p.a. How much amount will Albert get on maturity of the fixed deposit? |
| Option A | Rs. 8600 |
| Option B | Rs. 8620 |
| Option C | Rs. 8820 |
| Option D | None of these |
| Answer | Option **C** |
| Explanation | |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Amount | |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | = Rs. | http://www.indiabix.com/_files/images/aptitude/1-sym-obracket-h2.gif | 8000 x | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 1 + | 5 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | 2 | http://www.indiabix.com/_files/images/aptitude/1-sym-cbracket-h2.gif | | 100 | | |  | |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | = Rs. | http://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 8000 x | 21 | x | 21 | http://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | | 20 | 20 | | |  | = Rs. 8820. | |

|  |  |
| --- | --- |
| Question | At what rate percent per annum will the simple interest on a sum of money be 2/5 of the amount in 10 years? |
| Option A | 2% |
| Option B | 4% |
| Option C | 6% |
| Option D | 11% |
| Answer | Option B |
| Explanation | |  |  | | --- | --- | | Let sum = x | | | Time | = 10 years. | | Then, S.I | = 2x /5, | | Rate | =(100 ×2x / x×5×10)% | | **‹=›4%.** | |

|  |  |
| --- | --- |
| Question | At what percent per annum will a sum of money double in 16 years? |
| Option A | [6x1/4%](http://www.a2zinterviews.com/Aptitude/simple-interest/problems-on-simle-interest_4.php#t1) |
| Option B | [5X3/2%](http://www.a2zinterviews.com/Aptitude/simple-interest/problems-on-simle-interest_4.php#t1) |
| Option C | 7X2/3% |
| Option D | [None of these](http://www.a2zinterviews.com/Aptitude/simple-interest/problems-on-simle-interest_4.php#t1) |
| Answer | Option A |
| Explanation | |  |  | | --- | --- | | **Let Principal** | = P. | | Then,S.I = P and T = 16 yrs. | | | Rate | = (100×P/P×16)% | | **= 6×1/4%.** | |

|  |  |
| --- | --- |
| Question | The difference between simple interest and compound interest on Rs.1200 for one year at 10% per annum reckoned half yearly is |
| Option A | Rs. 2.50 |
| Option B | Rs. 3 |
| Option C | Rs. 4 |
| Option D | Rs. 3.75 |
| Answer | Option B |
| Explanation | |  |  | | --- | --- | | **S.I** | = Rs.(1200x10x1/100) | | Rs.120. | | **C.I** | =Rs[(1200x1+5/100)² -1200] | | Rs.123. | | **Difference** | = Rs.[123-120] | | Rs. 3. | |

|  |  |
| --- | --- |
| Question | Reena took a loan of Rs. 1200 with simple interest for as many years as the rate of interest. If she paid Rs. 432 as interest at the end of the loan period, what was the rate of interest |
| Option A | 3.6 |
| Option B | 5.6 |
| Option C | 6 |
| Option D | 18 |
| Answer | Option C |
| Explanation | |  |  |  | | --- | --- | --- | | Let rate = R% and time = R years. Then | | | | (1200 x R x R / 100) | **‹=›** 432 |  | | **‹=›**12R2 = 432 |  | | **‹=›**R2 = 36 |  | | **‹=› 6.** |  | |