**Test Review : View answers and explanation for this test.**

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| 1. | The price of commodity *X* increases by 40 paise every year, while the price of commodity *Y* increases by 15 paise every year. If in 2001, the price of commodity *X* was Rs. 4.20 and that of *Y* was Rs. 6.30, in which year commodity *X* will cost 40 paise more than the commodity *Y* ? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 2010 | | |  | B. | |  | | --- | | 2011 | | |  | C. | |  | | --- | | 2012 | | |  | D. | |  | | --- | | 2013 | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **B**  Explanation:  Suppose commodity *X* will cost 40 paise more than *Y* after *z* years.  Then, (4.20 + 0.40*z*) - (6.30 + 0.15*z*) = 0.40  https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif 0.25*z* = 0.40 + 2.10   |  |  |  |  |  | | --- | --- | --- | --- | --- | | https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif *z* = | 2.50 | = | 250 | = 10. | | 0.25 | 25 |   https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif *X* will cost 40 paise more than *Y* 10 years after 2001 *i.e.,* 2011.  Learn more problems on : [Decimal Fraction](https://www.indiabix.com/aptitude/decimal-fraction/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/decimal-fraction/discussion-185) |

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| 2. | There are two examinations rooms A and B. If 10 students are sent from A to B, then the number of students in each room is the same. If 20 candidates are sent from B to A, then the number of students in A is double the number of students in B. The number of students in room A is: |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 20 | | |  | B. | |  | | --- | | 80 | | |  | C. | |  | | --- | | 100 | | |  | D. | |  | | --- | | 200 | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **C**  Explanation:  Let the number of students in rooms A and B be *x* and *y* respectively.  Then, *x* - 10 = *y* + 10   https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif   *x* - *y* = 20 .... (i)       and *x* + 20 = 2(*y* - 20)   https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif   *x* - 2*y* = -60 .... (ii)  Solving (i) and (ii) we get: *x* = 100 , *y* = 80.  https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif The required answer A = 100.  Learn more problems on : [Simplification](https://www.indiabix.com/aptitude/simplification/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/simplification/discussion-214) |

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| 3. | If *a* - *b* = 3 and *a*2 + *b*2 = 29, find the value of *ab.* |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 10 | | |  | B. | |  | | --- | | 12 | | |  | C. | |  | | --- | | 15 | | |  | D. | |  | | --- | | 18 | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **A**  Explanation:  2*ab* = (*a*2 + *b*2) - (*a* - *b*)2     = 29 - 9 = 20  https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif*ab* = 10.  Learn more problems on : [Simplification](https://www.indiabix.com/aptitude/simplification/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/simplification/discussion-206) |

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| 4. | The product of two numbers is 120 and the sum of their squares is 289. The sum of the number is: |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 20 | | |  | B. | |  | | --- | | 23 | | |  | C. | |  | | --- | | 169 | | |  | D. | |  | | --- | | None of these | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **B**  Explanation:  Let the numbers be *x* and *y*.  Then, *xy* = 120 and *x*2 + *y*2 = 289.  https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif (*x* + *y*)2 = *x*2 + *y*2 + 2*xy* = 289 + (2 x 120) = 529  https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif *x* + *y* = 529 = 23.  Learn more problems on : [Problems on Numbers](https://www.indiabix.com/aptitude/problems-on-numbers/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/problems-on-numbers/discussion-255) |

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| 5. | The salaries A, B, C are in the ratio 2 : 3 : 5. If the increments of 15%, 10% and 20% are allowed respectively in their salaries, then what will be new ratio of their salaries? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 3 : 3 : 10 | | |  | B. | |  | | --- | | 10 : 11 : 20 | | |  | C. | |  | | --- | | 23 : 33 : 60 | | |  | D. | |  | | --- | | Cannot be determined | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **C**  Explanation:  Let A = 2*k*, B = 3*k* and C = 5*k*.   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | A's new salary = | 115 | of 2*k* = | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 115 | x 2*k* | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | = | 23*k* | | 100 | 100 | 10 |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | B's new salary = | 110 | of 3*k* = | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 110 | x 3*k* | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | = | 33*k* | | 100 | 100 | 10 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | C's new salary = | 120 | of 5*k* = | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 120 | x 5*k* | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | = 6*k* | | 100 | 100 |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | | https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif New ratio | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 23*k* | : | 33*k* | : 6*k* | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | = 23 : 33 : 60 | | 10 | 10 |   Learn more problems on : [Ratio and Proportion](https://www.indiabix.com/aptitude/ratio-and-proportion/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/ratio-and-proportion/discussion-347) |

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| 6. | A and B entered into partnership with capitals in the ratio 4 : 5. After 3 months, A withdrew https://www.indiabix.com/_files/images/aptitude/1-div-1by4.gif of his capital and B withdrew https://www.indiabix.com/_files/images/aptitude/1-div-1by5.gif of his capital. The gain at the end of 10 months was Rs. 760. A's share in this profit is: |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | Rs. 330 | | |  | B. | |  | | --- | | Rs. 360 | | |  | C. | |  | | --- | | Rs. 380 | | |  | D. | |  | | --- | | Rs. 430 | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **A**  Explanation:   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | A : B = | https://www.indiabix.com/_files/images/aptitude/1-sym-obracket-h1.gif | 4*x* x 3 + | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 4*x* - | 1 | x 4*x* | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | x 7 | https://www.indiabix.com/_files/images/aptitude/1-sym-cbracket-h1.gif | : | https://www.indiabix.com/_files/images/aptitude/1-sym-obracket-h1.gif | 5*x* x 3 + | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 5*x* - | 1 | x 5*x* | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | x 7 | https://www.indiabix.com/_files/images/aptitude/1-sym-cbracket-h1.gif | | 4 | 5 |      = (12*x* + 21*x*) : (15*x* + 28*x*)     = 33*x* :43*x*     = 33 : 43.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif A's share = Rs. | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 760 x | 33 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | = Rs. 330. | | 76 |   Learn more problems on : [Partnership](https://www.indiabix.com/aptitude/partnership/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/partnership/discussion-369) |

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| **Direction (for Q.No. 7):**  Each of the questions given below consists of a question followed by three statements. You have to study the question and the statements and decide which of the statement(s) is/are necessary to answer the question. | |
| 7. | |  |  | | --- | --- | | What is R's share of profit in a joit venture? | | | I. | Q started business investing Rs. 80,000. | | II. | R joined him after 3 months. | | III. | P joined after 4 months with a capital of Rs. 1,20,000 and got Rs. 6000 as his share profit. | |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | All I, II and III | | |  | B. | |  | | --- | | I and III only | | |  | C. | |  | | --- | | II and III only | | |  | D. | |  | | --- | | Even with all I, II and III, the answer cannot be arrived at | | |  | E. | |  | | --- | | None of these | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **D**  Explanation:  From I, II and III, we get P : Q : R = (120000 x 8) : (80000 x 12) : (*x* x 9).  Since R's investment is not given, the above ratio cannot be give.  https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif Given data is inadequate.  Learn more problems on : [Partnership](https://www.indiabix.com/aptitude/partnership/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/partnership/discussion-378) |

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| 8. | A alone can do a piece of work in 6 days and B alone in 8 days. A and B undertook to do it for Rs. 3200. With the help of C, they completed the work in 3 days. How much is to be paid to C? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | Rs. 375 | | |  | B. | |  | | --- | | Rs. 400 | | |  | C. | |  | | --- | | Rs. 600 | | |  | D. | |  | | --- | | Rs. 800 | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **B**  Explanation:   |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | C's 1 day's work = | 1 | - | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 1 | + | 1 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | = | 1 | - | 7 | = | 1 | . | | 3 | 6 | 8 | 3 | 24 | 24 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | A's wages : B's wages : C's wages = | 1 | : | 1 | : | 1 | = 4 : 3 : 1. | | 6 | 8 | 24 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gifC's share (for 3 days) = Rs. | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 3 x | 1 | x 3200 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | = Rs. 400. | | 24 |   Learn more problems on : [Time and Work](https://www.indiabix.com/aptitude/time-and-work/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/time-and-work/discussion-405) |

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| 9. | A goods train runs at the speed of 72 kmph and crosses a 250 m long platform in 26 seconds. What is the length of the goods train? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 230 m | | |  | B. | |  | | --- | | 240 m | | |  | C. | |  | | --- | | 260 m | | |  | D. | |  | | --- | | 270 m | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **D**  Explanation:   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Speed = | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 72 x | 5 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gifm/sec | = 20 m/sec. | | 18 |   Time = 26 sec.  Let the length of the train be *x* metres.   |  |  |  | | --- | --- | --- | | Then, | *x* + 250 | = 20 | | 26 |   https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif *x* + 250 = 520  https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif *x* = 270.  Learn more problems on : [Problems on Trains](https://www.indiabix.com/aptitude/problems-on-trains/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/problems-on-trains/discussion-457) |

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| 10. | If log10 2 = 0.3010, then log2 10 is equal to: |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | A. | |  |  |  | | --- | --- | --- | | |  | | --- | | 699 | | 301 | | | |  | B. | |  |  |  | | --- | --- | --- | | |  | | --- | | 1000 | | 301 | | | |  | C. | |  | | --- | | 0.3010 | | |  | D. | |  | | --- | | 0.6990 | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **B**  Explanation:   |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | | log2 10 = | 1 | = | 1 | = | 10000 | = | 1000 | . | | log10 2 | 0.3010 | 3010 | 301 |   Learn more problems on : [Logarithm](https://www.indiabix.com/aptitude/logarithm/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/logarithm/discussion-563) |

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| 11. | An error 2% in excess is made while measuring the side of a square. The percentage of error in the calculated area of the square is: |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 2% | | |  | B. | |  | | --- | | 2.02% | | |  | C. | |  | | --- | | 4% | | |  | D. | |  | | --- | | 4.04% | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **D**  Explanation:  100 cm is read as 102 cm.  https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif A1 = (100 x 100) cm2 and A2 (102 x 102) cm2.  (A2 - A1) = [(102)2 - (100)2]  = (102 + 100) x (102 - 100)  = 404 cm2.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif Percentage error = | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 404 | x 100 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif% | = 4.04% | | 100 x 100 |   Learn more problems on : [Area](https://www.indiabix.com/aptitude/area/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/area/discussion-580) |

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| 12. | In a shower, 5 cm of rain falls. The volume of water that falls on 1.5 hectares of ground is: |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 75 cu. m | | |  | B. | |  | | --- | | 750 cu. m | | |  | C. | |  | | --- | | 7500 cu. m | | |  | D. | |  | | --- | | 75000 cu. m | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **B**  Explanation:  1 hectare = 10,000 m2  So, Area = (1.5 x 10000) m2 = 15000 m2.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | Depth = | 5 | m | = | 1 | m. | | 100 | 20 |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif Volume = (Area x Depth) = | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 15000 x | 1 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gifm3 | = 750 m3. | | 20 |   Learn more problems on : [Volume and Surface Area](https://www.indiabix.com/aptitude/volume-and-surface-area/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/volume-and-surface-area/discussion-593) |

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| **Direction (for Q.No. 13):**  Each of the questions given below consists of a statement and / or a question and two statements numbered I and II given below it. You have to decide whether the data provided in the statement(s) is / are sufficient to answer the given question. Read the both statements and   * Give answer (A) if the data in Statement I alone are sufficient to answer the question, while the data in Statement II alone are not sufficient to answer the question. * Give answer (B) if the data in Statement II alone are sufficient to answer the question, while the data in Statement I alone are not sufficient to answer the question. * Give answer (C) if the data either in Statement I or in Statement II alone are sufficient to answer the question. * Give answer (D) if the data even in both Statements I and II together are not sufficient to answer the question. * Give answer(E) if the data in both Statements I and II together are necessary to answer the question. | |
| 13. | |  |  | | --- | --- | | What is the volume of a cube? | | | I. | The area of each face of the cube is 64 square metres. | | II. | The length of one side of the cube is 8 metres. | |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | I alone sufficient while II alone not sufficient to answer | | |  | B. | |  | | --- | | II alone sufficient while I alone not sufficient to answer | | |  | C. | |  | | --- | | Either I or II alone sufficient to answer | | |  | D. | |  | | --- | | Both I and II are not sufficient to answer | | |  | E. | |  | | --- | | Both I and II are necessary to answer | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **C**  Explanation:  Let each edge be *a* metres. Then,  I. *a*2 = 64     https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif  *a* = 8 m     https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif   Volume = (8 x 8 x 8) m3 = 512 m3.  Thus, I alone gives the answer.  II. *a* = 8 m     https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif   Volume = (8 x 8 x 8) m3 = 512 m3.  Thus, II alone gives the answer.  https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif Correct answer is (C).  Learn more problems on : [Volume and Surface Area](https://www.indiabix.com/aptitude/volume-and-surface-area/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/volume-and-surface-area/discussion-607) |

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| 14. | The reflex angle between the hands of a clock at 10.25 is: |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 180° | | |  | B. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | 192 | 1 | ° | | 2 | | | |  | C. | |  | | --- | | 195° | | |  | D. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | 197 | 1 | ° | | 2 | | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **D**  Explanation:   |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | Angle traced by hour hand in | 125 | hrs = | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 360 | x | 125 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | ° | = 312 | 1 | ° | . | | 12 | 12 | 12 | 2 |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | Angle traced by minute hand in 25 min = | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 360 | x 25 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | ° | = 150°. | | 60 |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif Reflex angle = 360° - | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 312 | 1 | - 150 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | ° | = 360° - 162 | 1 | ° | = 197 | 1° | . | | 2 | 2 | 2 |   Learn more problems on : [Clock](https://www.indiabix.com/aptitude/clock/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/clock/discussion-646) |

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| 15. | At what time between 4 and 5 o'clock will the hands of a watch point in opposite directions? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 45 min. past 4 | | |  | B. | |  | | --- | | 40 min. past 4 | | |  | C. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | 50 | 4 | min. past 4 | | 11 | | | |  | D. | |  |  |  |  |  | | --- | --- | --- | --- | --- | | |  |  |  | | --- | --- | --- | | 54 | 6 | min. past 4 | | 11 | | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **D**  Explanation:  At 4 o'clock, the hands of the watch are 20 min. spaces apart.  To be in opposite directions, they must be 30 min. spaces apart.  https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif Minute hand will have to gain 50 min. spaces.  55 min. spaces are gained in 60 min.   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | 50 min. spaces are gained in | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 60 | x 50 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gifmin. or 54 | 6 | min. | | 55 | 11 |  |  |  |  | | --- | --- | --- | | https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif Required time = 54 | 6 | min. past 4. | | 11 |   Learn more problems on : [Clock](https://www.indiabix.com/aptitude/clock/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/clock/discussion-655) |

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| 16. | A 12% stock yielding 10% is quoted at: |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | Rs. 83.33 | | |  | B. | |  | | --- | | Rs. 110 | | |  | C. | |  | | --- | | Rs. 112 | | |  | D. | |  | | --- | | Rs. 120 | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **D**  Explanation:  To earn Rs. 10, money invested = Rs. 100.   |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | To earn Rs. 12, money invested = Rs. | https://www.indiabix.com/_files/images/aptitude/1-sym-oparen-h1.gif | 100 | x 12 | https://www.indiabix.com/_files/images/aptitude/1-sym-cparen-h1.gif | = Rs. 120. | | 10 |   https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif Market value of Rs. 100 stock = Rs. 120.  Learn more problems on : [Stocks and Shares](https://www.indiabix.com/aptitude/stocks-and-shares/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/stocks-and-shares/discussion-662) |

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| 17. | In how many different ways can the letters of the word 'DETAIL' be arranged in such a way that the vowels occupy only the odd positions? |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 32 | | |  | B. | |  | | --- | | 48 | | |  | C. | |  | | --- | | 36 | | |  | D. | |  | | --- | | 60 | | |  | E. | |  | | --- | | 120 | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **C**  Explanation:  There are 6 letters in the given word, out of which there are 3 vowels and 3 consonants.  Let us mark these positions as under:  (1) (2) (3) (4) (5) (6)  Now, 3 vowels can be placed at any of the three places out 4, marked 1, 3, 5.  Number of ways of arranging the vowels = 3P3 = 3! = 6.  Also, the 3 consonants can be arranged at the remaining 3 positions.  Number of ways of these arrangements = 3P3 = 3! = 6.  Total number of ways = (6 x 6) = 36.  Learn more problems on : [Permutation and Combination](https://www.indiabix.com/aptitude/permutation-and-combination/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/permutation-and-combination/discussion-680) |

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| 18. | Two dice are tossed. The probability that the total score is a prime number is: |
| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | |  | A. | |  |  |  | | --- | --- | --- | | |  | | --- | | 1 | | 6 | | | |  | B. | |  |  |  | | --- | --- | --- | | |  | | --- | | 5 | | 12 | | | |  | C. | |  |  |  | | --- | --- | --- | | |  | | --- | | 1 | | 2 | | | |  | D. | |  |  |  | | --- | --- | --- | | |  | | --- | | 7 | | 9 | | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **B**  Explanation:  Clearly, *n*(S) = (6 x 6) = 36.  Let E = Event that the sum is a prime number.   |  |  | | --- | --- | | Then E | = { (1, 1), (1, 2), (1, 4), (1, 6), (2, 1), (2, 3), (2, 5), (3, 2), (3, 4), (4, 1), (4, 3),       (5, 2), (5, 6), (6, 1), (6, 5) } |   https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif *n*(E) = 15.   |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | | https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif P(E) = | *n*(E) | = | 15 | = | 5 | . | | *n*(S) | 36 | 12 |   Learn more problems on : [Probability](https://www.indiabix.com/aptitude/probability/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/probability/discussion-703) |

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| 19. | An observer 1.6 m tall is 203 away from a tower. The angle of elevation from his eye to the top of the tower is 30°. The heights of the tower is: |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 21.6 m | | |  | B. | |  | | --- | | 23.2 m | | |  | C. | |  | | --- | | 24.72 m | | |  | D. | |  | | --- | | None of these | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **A**  Explanation:  Let AB be the observer and CD be the tower.  https://www.indiabix.com/_files/images/aptitude/1-z-646-004.gif  Draw BE https://www.indiabix.com/_files/images/aptitude/1-sym-plr.gif CD.  Then, CE = AB = 1.6 m,        BE = AC = 203 m.   |  |  |  | | --- | --- | --- | | DE | = tan 30° = | 1 | | BE | 3 |  |  |  |  | | --- | --- | --- | | https://www.indiabix.com/_files/images/aptitude/1-sym-imp.gif DE = | 203 | m = 20 m. | | 3 |   https://www.indiabix.com/_files/images/aptitude/1-sym-tfr.gif CD = CE + DE = (1.6 + 20) m = 21.6 m.  Learn more problems on : [Height and Distance](https://www.indiabix.com/aptitude/height-and-distance/)  Discuss about this problem : [Discuss in Forum](https://www.indiabix.com/aptitude/height-and-distance/discussion-735) |

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| **Direction (for Q.No. 20):**  Find the odd man out. | |
| 20. | 1, 4, 9, 16, 23, 25, 36 |
| |  |  |  |  | | --- | --- | --- | --- | |  | A. | |  | | --- | | 9 | | |  | B. | |  | | --- | | 23 | | |  | C. | |  | | --- | | 25 | | |  | D. | |  | | --- | | 36 | |   Your Answer: Option **(Not Answered)**  Correct Answer: Option **B**  Explanation:  Each of the numbers except 23, is perfect square. |