APTITUDE - TRAINS

Important Terms

1. Speed in km/hr

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a km /hr = (a * 5 / 18) m/s.
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2. Speed in m/s

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a m/s = ( a * 18/5) km/hr.
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3. Time taken by a train of length L metres to pass a pole or a standing man or a signal post is equal to the time taken by the train to cover

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L Metres.
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4. Time taken by a train of length L metres to pass a stationary object of length b metres is the time taken by the train to cover

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(L + b) metres.
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5. Suppose two train or two bodies are moving in the same direction at u m/s and v m/s , where u > v, then their

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relative speed = (u – v) m/s.
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6. Suppose two trains or two bodies are moving in opposite directions at u m/s and v m/s , then their

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relative speed = ( u + v) m/s.
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7. If two trains of length a metres and b metres are moving in opposite directions at u m/s and v m/s, then time taken by the trains to cross each other =

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(a+b) / ( u+ v) sec.
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8. If two train s of length a metres and b metres are moving in the same direction at u m/s and v m/s , then the time taken by the faster train to cross the slower train =

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( a+b) / (u + v ) sec.
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9. If two train (or bodies) start at the same time from points A and B towards each other and after crossing they take a and b sec in reaching B and A respectively, then

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( A  speed) : ( B speed) = ( √b : √a ).
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Solved Examples

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