1. Two pipes A and B can fill a cistern in 20 and 30 minutes respectively, and a third pipe C can empty it in 40 minutes. How long will it take to fill the cistern if all the three are opened at the same time?

* [**A.**](javascript:%20void(0)) 19 1/7 min
* [**B.**](javascript:%20void(0)) 15 1/7 min
* [**C.**](javascript:%20void(0)) 17 1/7 min
* [**D.**](javascript:%20void(0)) 7 1/7 min

2. Two pipes A and B can separately fill a tank in 2 minutes and 15 minutes respectively. Both the pipes are opened together but 4 minutes after the start the pipe A is turned off. How much time will it take to fill the tank?

* [**A.**](javascript:%20void(0)) 9 min
* [**B.**](javascript:%20void(0)) 10 min
* [**C.**](javascript:%20void(0)) 11 min
* [**D.**](javascript:%20void(0)) 12 min

3. Two pipes P and Q can fill a cistern in 12 and 15 minutes respectively. Both are opened together, but at the end of 3 minutes the first is turned off. How much longer will the cistern take to fill?

* [**A.**](javascript:%20void(0)) 9 1/4 min
* [**B.**](javascript:%20void(0)) 11 1/4 min
* [**C.**](javascript:%20void(0)) 7 1/4 min
* [**D.**](javascript:%20void(0)) 8 1/2 min

4. A cistern has a leak which would empty the cistern in 20 minutes. A tap is turned on which admits 4 liters a minute into the cistern, and it is emptied in 24 minutes. How many liters does the cistern hold?

* [**A.**](javascript:%20void(0)) 480 liters
* [**B.**](javascript:%20void(0)) 600 liters
* [**C.**](javascript:%20void(0)) 720 liters
* [**D.**](javascript:%20void(0)) 800 liters

5. Two taps can separately fill a cistern 10 minutes and 15 minutes respectively and when the waste pipe is open, they can together fill it in 18 minutes. The waste pipe can empty the full cistern in?

* [**A.**](javascript:%20void(0)) 7 min [**B.**](javascript:%20void(0)) 13 min
* [**C.**](javascript:%20void(0)) 23 min [**D.**](javascript:%20void(0)) 9 min

6. A cistern is filled by a tap in 3 1/2 hours. Due to leak in the bottom of the cistern, it takes half an hour longer to fill the cistern. If the cistern is full how long will it take the leak to empty it?

* [**A.**](javascript:%20void(0)) 7 hours
* [**B.**](javascript:%20void(0)) 8 hours
* [**C.**](javascript:%20void(0)) 14 hours
* [**D.**](javascript:%20void(0)) 28 hours

7. Two pipes A and B can fill a tank in 4 and 5 hours respectively. If they are turned up alternately for one hour each, the time taken to fill the tank is?

* [**A.**](javascript:%20void(0)) 2 hrs 15 min
* [**B.**](javascript:%20void(0)) 4 hrs 24 min
* [**C.**](javascript:%20void(0)) 5 hrs
* [**D.**](javascript:%20void(0)) 3 hrs

8. Two pipes A and B can fill a cistern in 12 and 15 minutes respectively. Both are opened together but after 3 minutes A is turned off. After how much more time will the cistern be filled?

* [**A.**](javascript:%20void(0)) 3 1/4 min
* [**B.**](javascript:%20void(0)) 5 1/4 min
* [**C.**](javascript:%20void(0)) 8 1/4 min
* [**D.**](javascript:%20void(0)) 9 1/4 min

9. A cistern is normally filled in 8 hours but takes two hours longer to fill because of a leak in its bottom. If the cistern is full, the leak will empty it in?

* [**A.**](javascript:%20void(0)) 16 hrs
* [**B.**](javascript:%20void(0)) 20 hrs
* [**C.**](javascript:%20void(0)) 40 hrs
* [**D.**](javascript:%20void(0)) 25 hrs

10. Two pipes A and B can separately fill a tank in 12 and 15 minutes respectively. A third pipe C can drain off 45 liters of water per minute. If all the pipes are opened, the tank can be filled in 15 minutes. What is the capacity of the tank?

* [**A.**](javascript:%20void(0)) 480 liters
* **[B.](javascript:%20void(0))** 540 liters
* [**C.**](javascript:%20void(0)) 600 liters
* [**D.**](javascript:%20void(0)) 675 liters