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| **CHAIN RULE** |

1. **If 15 toys cost Rs 2340, what do 35 toys cost?**

**More toys, more cost (direct proportion)**

**= (35 x 2340)/15 = Rs 5460**

1. **If 36 men can do a certain piece of work in 25 days, in how many days will 15 men do it?**

**Less men, more days (indirect proportion)**

**= (36 x 25)/15 = 60 days**

1. **If 20 men working together can finish a job in 20 days, then the number of days taken by 25 men of the same capacity to finish the job is:**
2. **25 (b) 20 (c) 16 (d) 12**

**More men, less days (indirect proportion)**

**= (20 x 20)/25 = 16 days**

1. **If 10 men can reap a field in 8 days, then 8 men will reap the same field in:**
2. **4 days (b) 5 days (c) 10 days (d) 20 days**

**Less men, more days (indirect proportion)**

**= (10 x 8)/8 = 10 days**

1. **A certain number of men could do a piece of work in 60 days. If there were 8 more men, it could be finished in 10 days less. The number of men in the beginning were:**
2. **30 (b) 35 (c) 40 (d) 45**

**Let x men can finish the work in 60 days.**

**Then (x + 8) men can finish it in 50 days.**

**More men, less days (indirect proportion)**

**60x = 50(x + 8) implies 10x = 400 or x = 40**

**Therefore, number of men in the beginning = 40.**

1. **A rope makes 70 rounds of the circumference of a cylinder whose radius of the base is 14 cm. How many times can it go round a cylinder with radius 20 cm?**

**More radius, less rounds (indirect proportion)**

**14 cm ………..70 rounds**

**20 cm ……….. ?**

**= (14 x 70)/20 = 49 rounds**

1. **If (3/5) of a cistern is filled in 1 minute, how much more time will be required to fill the rest of it?**
2. **40 sec (b) 36 sec (c) 30 sec (d) 24 sec**

**Total capacity of the cistern = 5 units (denominator value)**

**To fill 3 parts, it needs 60 sec of time (1 min)**

**To fill rest of 2 parts, it takes 40 sec of time.**

1. **Ten pipes through which water flows at the same rate can fill a tank in 28 minutes. If three pipes go out of order, how long will the remaining pipes take to fill the tank?**

**10 pipes …………..28 min**

**7 pipes …………….?**

**= (10 x 28)/7 = 40 minutes**

1. **A contractor undertook to do a certain piece of work in 9 days. He employed certain number of men, but 6 of them being absent from the very first day, the rest could finish the work in 15 days. The number of men originally employed were:**
2. **12 (b) 15 (c) 18 (d) 24**

**Let there are x men at the beginning.**

**Now, less men would take more days.**

**x men ………………… 9 days**

**(x – 6) men …………. 15 days**

**9x = 15(x – 6) (or) 9x = 15x – 90 (or) 6x = 90 (or) x = 15 men**

1. **A wheel rotates 10 times every minute and moves 20 cm during each rotation. How many centimeters does the wheel move in 1 hour?**
2. **600 (b) 1200 (c) 2000 (d) 12000**

**Number of times wheel moves in 1 hour = 10 x 60 = 600**

**Therefore, distance moved = 600 x 20 = 12000 cm**