Work, Men and Effort

Formula: Work done = Efficiency × Time taken

1) 8 machines can produce 4800 identical pens in 6 hours. How many pens can one machine produce in 1 hour ?

2) If 8 men needed to dig a well 12m deep in 3 days. How many days would 5 men take to dig the same well but 15 m deep ?

3) If 300 men could complete a construction in 16 days. How many men would be required to complete half the work in 12 days ?

4) If it takes 3 hours for machine A to produce N identical computer parts, and it takes machine B only 2 hours to do the same job, how long would it take to do the job if both machines worked simultaneously?.

5) A and B, working separately, can do a piece of work in 10 and 15 days respectively. If they work on alternate days beginning with A, then in how many days will the work be completed?
(a) 18 days (b) 13 days (c) 12 days (d) 6 days

6) If Johnny can mow the lawn in 30 minutes and with the help of his brother, Bobby, they can mow the lawn 20 minutes, how long would it take Bobby working alone to mow the lawn?
(A)1/2hour (B)3/4hour (C) 1 hour (D) 3/2 hours (E) 2 hours

7) A tank is being drained at a constant rate. If it takes 3 hours to drain 6/7 of its capacity, how much longer will it take to drain the tank completely?
(A) 1 / 2 hour (B) 3 / 4 hour (C) 1 hour (D) 3 / 2 hours (E) 2 hours

8) If two workers can assemble a car in 8 hours and a third worker can assemble the same car in 12 hours, then how long would it take the three workers together to assemble the car?

(A) $\frac{5}{12}$ hrs

(B) $2\frac{2}{5}$ hrs

(C) $2\frac{4}{5}$ hrs

(D) $3\frac{1}{2}$ hrs

(E) $4\frac{4}{5}$ hrs