



$$(x/100)y=z;$$
$$(x/z)=(100/y).$$
$$(x/z) \times 100=100 \times (100/y)=>1002/y.$$

18 Two pipes A and B can fill a tank in 20 minutes and 40 minutes. If both pipes are opened simultaneously, after how much time should B be closed so that the tank is full in 18 minutes ?

- A. 10 min
- B. 9 min
- C. 4 min ☒
- D. 7 min

- Your Answer :
- Correct Answer : C

◦ **Answer Justification :**

Explanation:

A fill the tank in 1 minute ($20 \times 2 = 40$) = 2 units

B fill the tank in 1 minute ($40 \times 1 = 40$) = 1 unit

For 18 min(A) = $18 \times 2 = 36$ units

Remaining = $40 - 36 = 4$ units

Time for B be closed so that the tank is full in 18 minutes = $4/1 = 4$ min

19 A box contains 10 white balls and 6 black balls. 2 balls are drawn at random. What is the probability that they are of the same colour?

- A. $\frac{1}{2}$ ☒
- B. 2
- C. $\frac{1}{3}$
- D. $\frac{1}{5}$

- Your Answer :
- Correct Answer : A

◦ **Answer Justification :**

Explanation:

$$10C2 = 10 \times 9/2 = 45$$

$$6C2 = 6 \times 5/2 = 15$$

$$16C2 = 16 \times 15/2 = 120$$

$$P = 45+15/120 = 60/120 = \frac{1}{2}$$