

ALL BRANCH (English)



General Aptitude

Quantitative Aptitude

DPP 02 Discussion
Clock



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How many times do the hands of a clock point towards each other in a day?

- ☐ A 18
- ☐ B 19
- ☒ C 22
- ☐ D 20

Coinciding

12 hrs = 11 times

Day 24 hrs = 22 times

MCQ



A clock which gains 5 minutes in every two hours is set at 12.00 P.M. on a certain day. Find the time shown by the watch on the next day 11 A.M.

$$(+)\ 2.5\ \text{min/hr}$$

$$23\ \text{hours}\ (12\text{pm} - 11\text{am})$$

$$23 \times 2.5 = 57.5 (+)$$

A 12 hrs 47 min 30 sec

B 11 hrs 57 min 30 sec

C 12 hrs 20 min 30 sec

D 12 hrs 15 min 30 sec

MCQ



A clock which loses 10 seconds in every minute is set at 2.00 P.M. on a certain day. Find the time shown by the watch on the next day 8 P.M.

$$(-) 10 \text{ sec} / \text{min}$$

$$(-) 10 \text{ min} / \text{hr}$$

$$30 \text{ hours (2pm - 8pm)}$$

$$30 \times 10 = 300 (-) \text{ min}$$

$$\frac{300}{60} = \underline{5 \text{ hrs}} \quad (-)$$

A 1 P.M.

B 2 P.M.

C 3 P.M.

D 4 P.M.

MCQ

$$60 \times 8 = 480$$

A clock which loses 50 seconds every two minutes is set at 6.00 P.M. on a certain day. What is the time shown by this watch on the next day if the current time is 3.00 P.M.?

- ☐ A 4 A.M.
- ☐ B 9:15 A.M.
- ☐ C 5 A.M.
- ☒ D 6:15 A.M.

$$\begin{array}{r} 15 \\ - 8 \text{ hrs } 45 \text{ min} \\ \hline 6:15 \text{ am} \end{array}$$

$$50 \text{ sec} \rightarrow 2 \text{ min}$$

$$50 \text{ min} \rightarrow 2 \text{ hours}$$

$$(-) 25 \text{ min/hr}$$

$$21 \text{ hours (6pm - 3pm)}$$

$$\begin{array}{r} 21 \times 25 \\ = 525 \text{ min} \\ (-) \\ \hline 525 (-) \\ 60 = 8 \text{ hrs} \\ \hline 45 \text{ min} \end{array}$$

How many times do the hands of a clock coincide in a day?

☒ A 22

☐ B 23

☐ C 24

☐ D 48

0°

12 hours = 11 times

(Day) 24 hours = 22 times

How many times are the hands of a clock at right angles in a day?

A 22

B 48

☒ C 44

D 46

90°

12 hrs = 22 times

24 hrs = 44 times

What is the angle between the hands of the clock at 2:45?

A $180\frac{1}{2}^\circ$

B $182\frac{1}{2}^\circ$

C $172\frac{1}{2}^\circ$

D $181\frac{1}{2}^\circ$

$$\begin{aligned}
 &2 \rightarrow 60^\circ \\
 &45 \times 5.5 \rightarrow 247.5^\circ \\
 &\quad \underline{\hspace{1cm}} \\
 &\quad 187.5^\circ \\
 &\quad \underline{\hspace{1cm}} \\
 &360 - 187.5 \\
 &= \underline{\underline{172.5^\circ}}
 \end{aligned}$$

MCQ



At 9' 0 clock find the angle between the hands of the clock?

A 270°

B $250\frac{1^\circ}{2}$

C $150\frac{1^\circ}{2}$

D $220\frac{1^\circ}{2}$

$$360 - 90 \\ = \underline{\underline{270}}$$

MCQ



At what time between 6 0' clock and 7 0' clock the hands of the clock will coincide?

A $30\frac{8}{11}$ min

B $32\frac{8}{11}$ min

C $20\frac{8}{11}$ min

D $25\frac{8}{11}$ min



$$\frac{180}{5.5} = \frac{360}{11} = 32\frac{8}{11}$$

$6:32\frac{8}{11}$

MCQ



At what time between 3 0' clock and 4 0' clock the hands of the clock will be at right angles?

A $30\frac{8}{11}$ min

B $32\frac{8}{11}$ min

C $20\frac{8}{11}$ min

D $25\frac{8}{11}$ min



$$\frac{180}{5.5} = \frac{360}{11} = 32\frac{8}{11}$$



Thank You!

GW Soldiers