

Aptitude Clocks Questions and Answers Pdf

1. How many times in a day, are the hands of a clock in straight line but opposite in direction?

- (A) 20
- (B) 22
- (C) 24
- (D) 48

Ans: B

The hands of a clock point in opposite directions (in the same straight line) 11 times in every 12 hours (Because between 5 and 7 they point in opposite directions at 6 O'clock only).

So, in a day, the hands point in the opposite directions 22 times.

2. How many times in a day, the hands of a clock are straight?

- (A) 22
- (B) 24
- (C) 44
- (D) 48

Ans: C

In 12 hours, the hands coincide or are in opposite directions 22 times.

∴ In 24 hours, the hands coincide or are in opposite direction 44 times a day.

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

- (A) 20
- (B) 21
- (C) 22
- (D) 24

Ans: C

The hands of a clock coincide 11 times in every 12 hours (since between 11 and 1, they coincide only once i.e., at 12 o'clock).

∴ the hands coincide 22 times in a day.

4. How many times are the hands of a clock at right angle in a day?

(A) 22

(B) 24

(C) 44

(D) 48

Ans; C

In 12 hours, they are right angles times.

∴ In 24 hours, they are at right angles 44 times.

5. The reflex angle between the hands of a clock at 10.25 is

a. 180° ;

b. $192\frac{1}{2}^\circ$;

c. 195° ;

d. $197\frac{1}{2}^\circ$;

Ans: D

$$\text{Angle traced by hour hand in } \frac{125}{12} \text{ hrs} = \left(\frac{360}{12} \times \frac{125}{12} \right)^\circ = 312\frac{1}{2}^\circ.$$

$$\text{Angle traced by minute hand in 25 min} = \left(\frac{360}{60} \times 25 \right)^\circ = 150^\circ.$$

$$\therefore \text{ Reflex angle} = 360^\circ - \left(312\frac{1}{2} - 150 \right)^\circ = 360^\circ - 162\frac{1}{2}^\circ = 197\frac{1}{2}^\circ.$$