100% Concept Coverage | All Type Questions | PYQs

CUET GAT - Reasoning

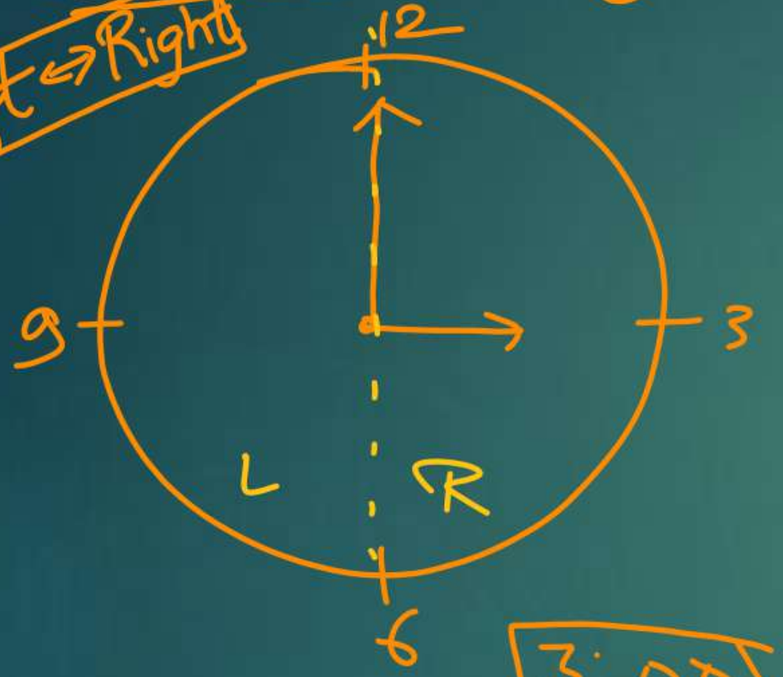
Clock

By Vivek Sir

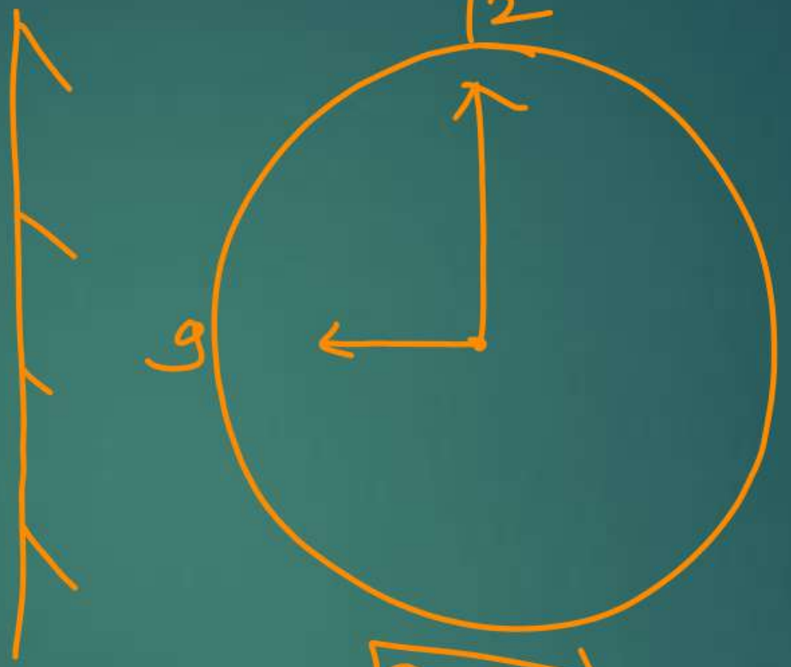


Mirror Image :

Left ↔ Right



3:00



9:00

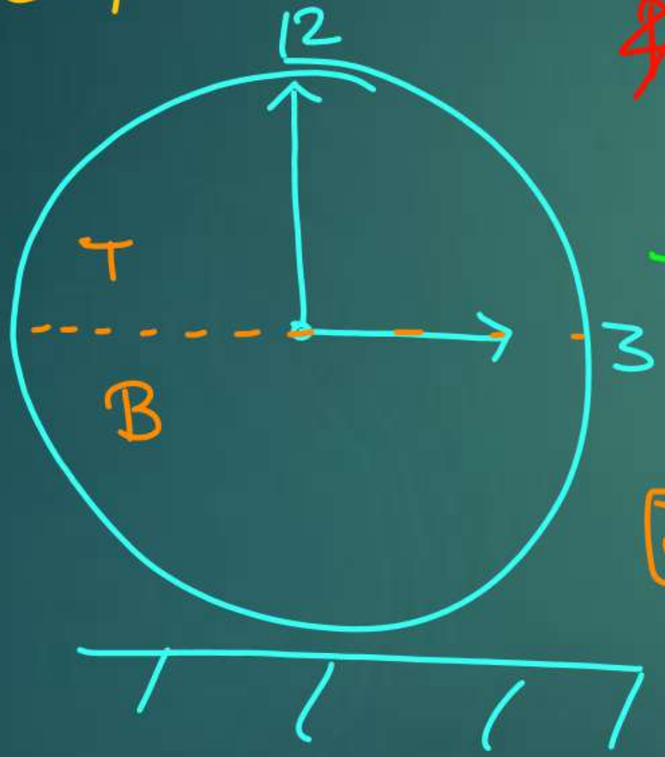
12
-3
9

★ 11 : 60
-3 : 00
8 : 60

9 : 00 //

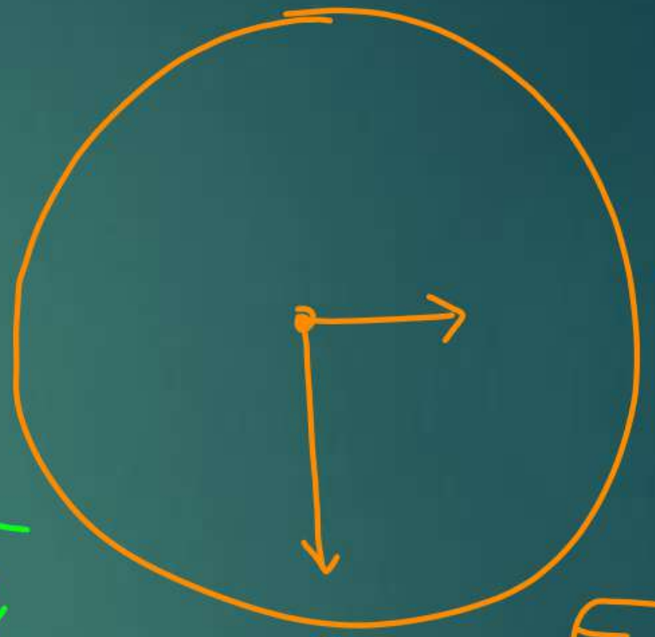
Water Image:

Top ⟷ Bottom



18 : 30
− 3 : 00
15 : 30
3 : 30 //

3 : 00



3 : 30

Q.1. 5 : 11

(i) MI =

(ii) WI =

(i) 11 : 60
-5 : 11
6 : 49 //

(ii) 18 : 30
5 : 11
13 : 19 → 1 : 19 //

Q.2 2 : 17 : 49

(i) MI = ?

(ii) WI = ?

(a) 9 : 42 : 10

~~(b)~~ 9 : 42 : 11

(c) 9 : 41 : 10

(d) NOT

(ii) 18 : 30

18 : 29 : 60

− 2 : 17 : 49

(i) 12

11 : 60

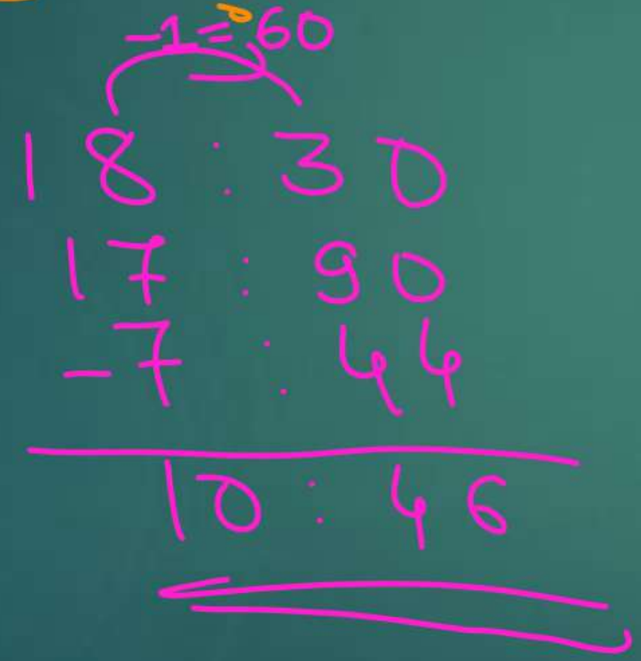
11 : 59 : 60

− 2 : 17 : 49

9 : 42 : 11

Q3. 7 : 44

WI = ?



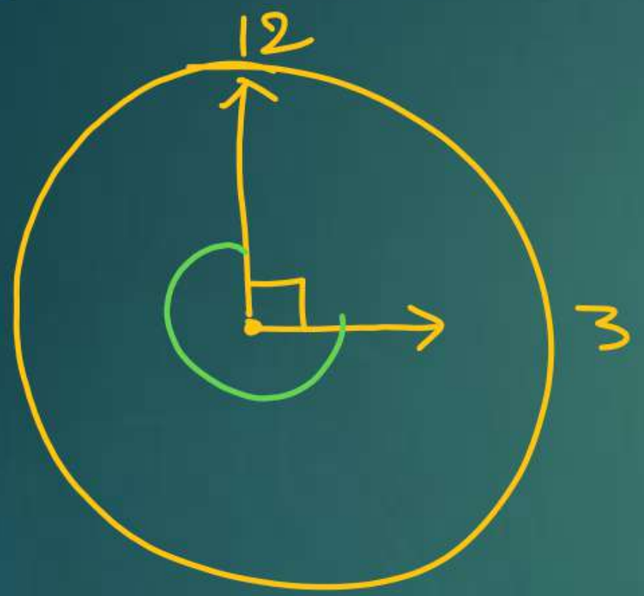
(a) 10 : 44

(b) 10 : 45

~~(c) 10 : 46~~

(d) NOT

∠ between 2 hands:



3:00 90°

270°

Types of ∠s:

(i) Interior ∠ : 0°-180°

(ii) Exterior ∠ : 180°-360°

✱ I.A = 360° − EA

E.A = 360° − IA

3:00

$$\angle = \left| \frac{11}{2} M - 30H \right|$$

$$= \frac{11}{2} \times 0 - 30 \times 3$$

$$= 0 - 90$$

$$= -90$$

$$= 90^\circ //$$

Q. 4:24

$\angle = \frac{11}{2} \times 24 - 30 \times 4$

$= 132 - 120$

$= 12^\circ$

(a) 10

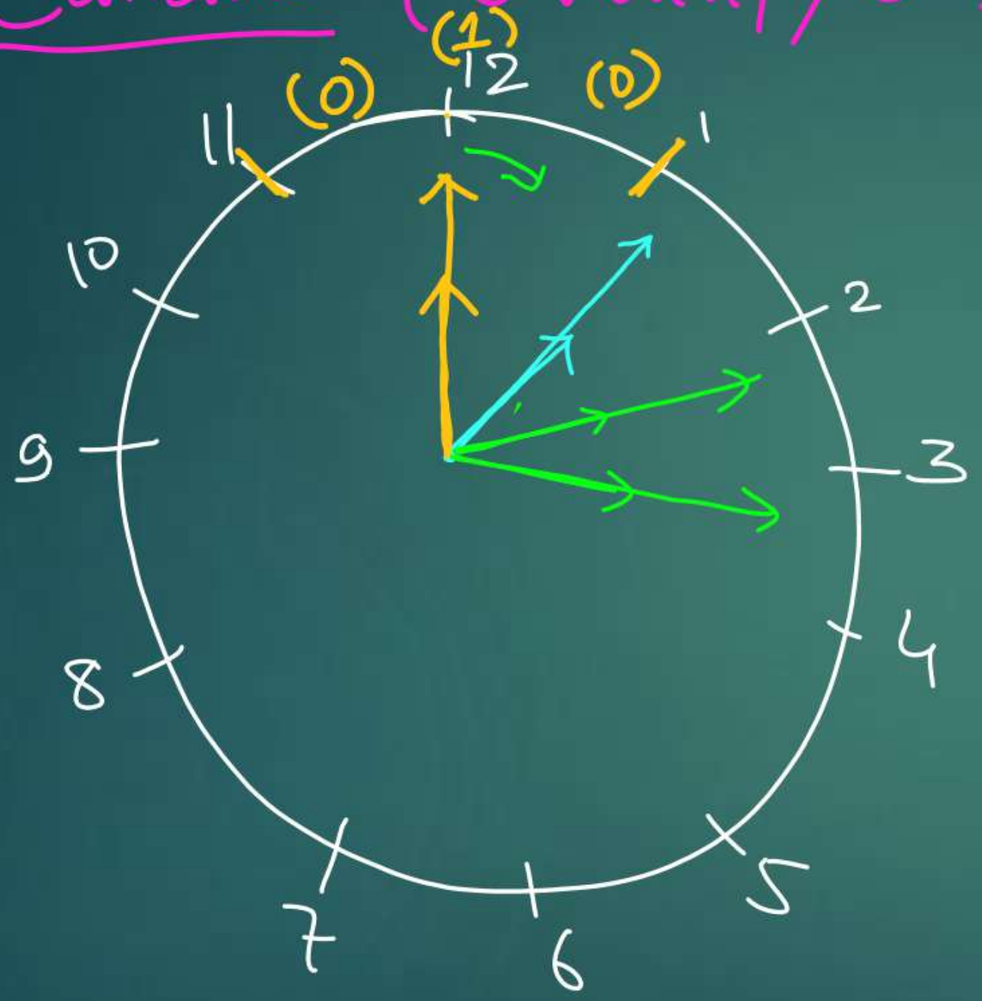
~~(b)~~ 12

(c) 14

(d) NOT

$360^\circ - 12^\circ = 348^\circ$.

Coincide: (Overlap/0°)



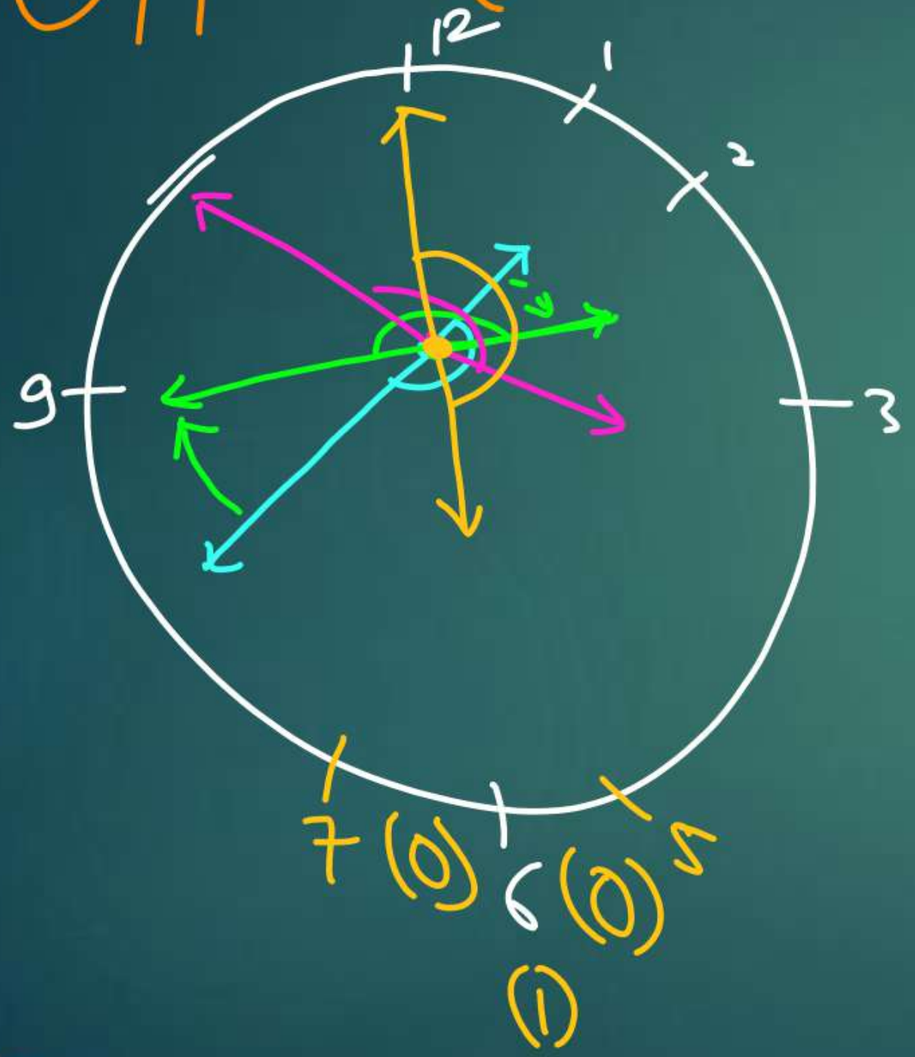
1 Hour → 1 time

12 Hours → 12 times

-1 (12:00)

11 times

Opposite (St. Line/180°):



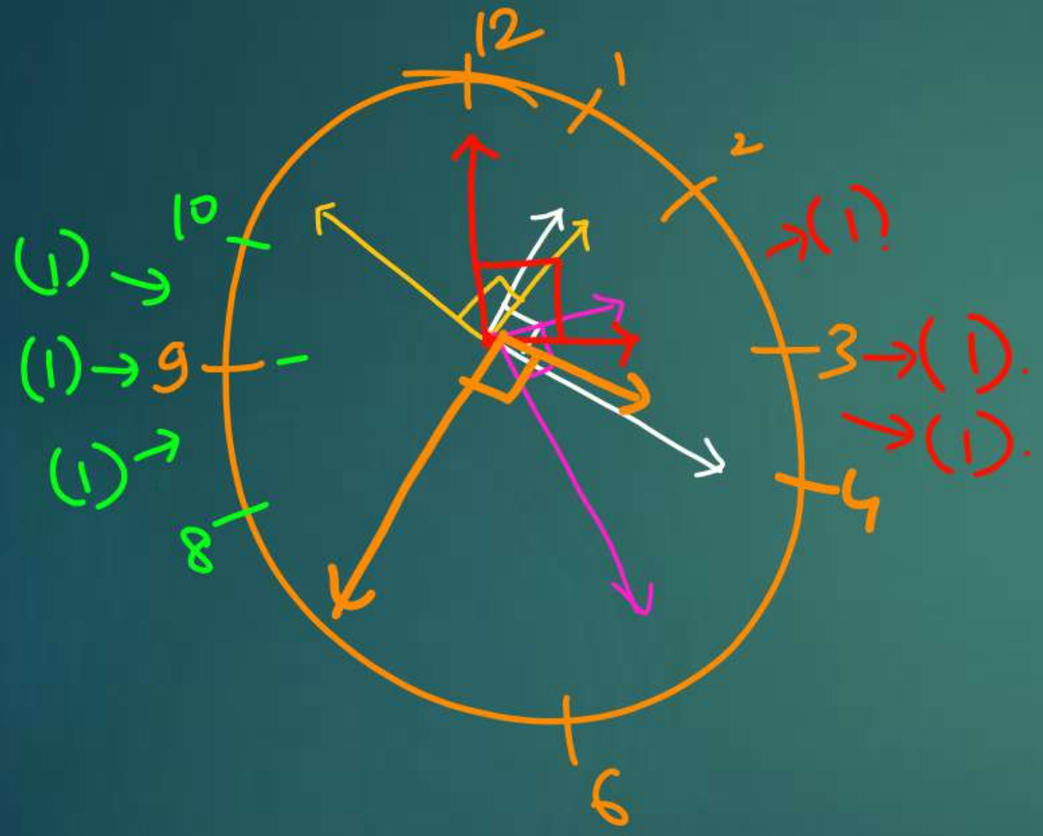
1 H → 1 t

12 H → 12 t

−1 (6:00)

11 times

Right ∠ (Perpendicular/90°)



1 H → 2 t

12 H → 24 t

-2 (3:00, 9:00)

22 times

Q. 180°, 2d
(48 H)

12 H → 11 times

48 H → $\frac{11}{12} \times 48^{4}$

$= 44$ //

(a) 22

(b) 33

~~(c) 44~~

(d) Not

Q. 90°, 1 day ?
(24 H)

12 H → 22 t
24 H → 44 t //

(a) 22
(b) 33
~~(c)~~ 44
(d) NOT

Q. 7:00 AM — 11 PM
Today Tomorrow

4H → 8t X
−1 (9:00)
7t

66 + 7 = 73 //

90°

7 AM — 7 PM : 22
(Tod) (Tod)

7 PM — 7 AM : 22
(Tod) (Tomm.)

7 AM — 7 PM : 22
(Tomm) (Tomm)

7PM(Tomm) — 11PM(Tom) : 7

(a) 50
(b) 51
(c) 52
(d) NOT

Q. 4 to 5, 180°

(a) $4:54\frac{10}{11}$

~~(b)~~ $4:54\frac{6}{11}$

(c) 4:55

(d) NOT

$$\angle = \frac{11}{2}M - 30H$$

$$\Rightarrow 180 = \frac{11}{2}M - 30\times 4$$

$$\Rightarrow \frac{11M}{2} - 120 = 180 \ (<360)$$

$$\Rightarrow \frac{11M}{2} = 300$$

$$\Rightarrow M = \frac{600}{11}$$

4:01, 4:42, 4:21

4:59

4:59:59

$4:\frac{600}{11}$

$4:54\frac{6}{11}$

$4:54:-$

$11\overline{)600}\ 54\ 6$

Q: 9-10, opposite?

(a) ~~9 : $\frac{180}{11}$~~

(b) 9 : $\frac{170}{11}$

(c) 9 : $\frac{190}{11}$

(d) NOT

$180 = \frac{11}{2}M - 30 \times 9$

$\Rightarrow \frac{11}{2}M - 270 = 180$

$\Rightarrow \frac{11}{2}M = 450$ ($>360°$)

$\Rightarrow M = \frac{900}{11}$

$= 81.8$

$\approx 9 : 82$

$\Rightarrow \frac{11}{2}M = \begin{array}{r} 450 \\ -360 \\ \hline 90 \end{array}$

$\Rightarrow \frac{11}{2}M = 90$

$\Rightarrow M = \frac{180}{11}$

$9 : \frac{180}{11}$

$\angle = +90^\circ$
-90°

Q. 4-5, 90°

$$90 = \frac{11}{2}M - 30\times 4$$

$$\Rightarrow \frac{11}{2}M - 120 = 90$$

$$\Rightarrow \frac{11}{2}M = 210$$

$$\Rightarrow M = \frac{420}{11}$$

$$4 : \frac{420}{11} \;//$$

$$-90 = \frac{11}{2}M - 30\times 4$$

$$\Rightarrow \frac{11}{2}M - 120 = -90$$

$$\Rightarrow \frac{11}{2}M = 30$$

$$\Rightarrow M = \frac{60}{11}$$

$$4 : \frac{60}{11} \;//$$

Q. What angle is made by minute hand in 42 sec. ?

(a) 8.4°

(b) 2.1°

(c) 4.2°

(d) NOT

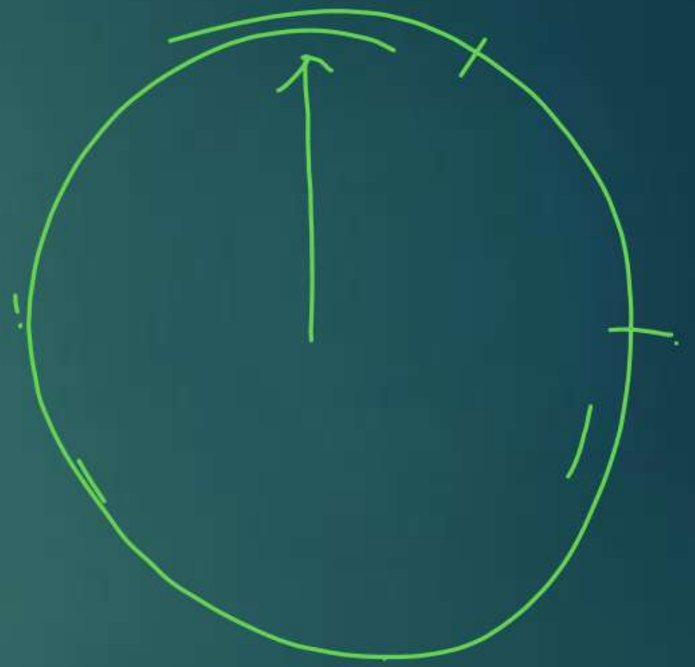
* 60 min = 360°

$\Rightarrow 1 \text{ min} = \frac{360^\circ}{60} = 6^\circ$

$\Rightarrow 60 \text{ sec} = 6^\circ$

$\Rightarrow 42 \text{ sec} = \frac{6}{60} \times 42$

$= 4.2^\circ$



$60\,sec + 12\,sec = 72\,sec$

Q. Minute hand, 1 min 12 sec

(a) 6.2°

(b) 7.5°

~~(c)~~ 7.2°

(d) NOT

$60\ min = 360°$

$1\ min = 6°$

$60\ sec = 6°$

$72\ sec = \frac{6}{60} \times 72$

$= 7.2°$

Q. How hand, 56 sec ?

(a) $\frac{7^\circ}{15}$

(b) $\frac{4^\circ}{15}$

(c) $\frac{7^\circ}{17}$

(d) NOT



$\because 12H = 360^\circ$

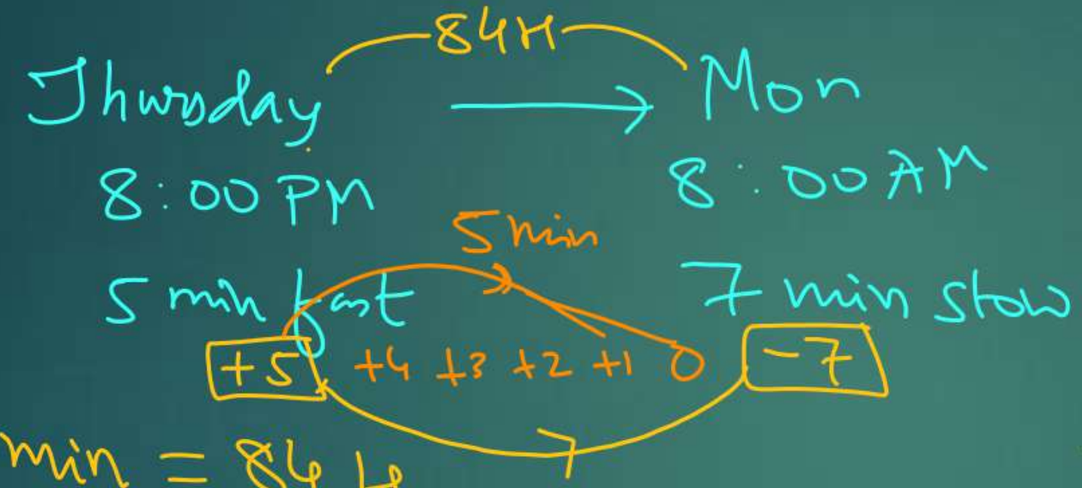
$\Rightarrow 1H = 30^\circ$

$\Rightarrow 60 \times 60 \text{ sec} = 30^\circ$

$\Rightarrow 56 \text{ sec} = \frac{30}{60 \times 60} \times 56 = \frac{7^\circ}{15}$ //

Error

Q. 'Slow'



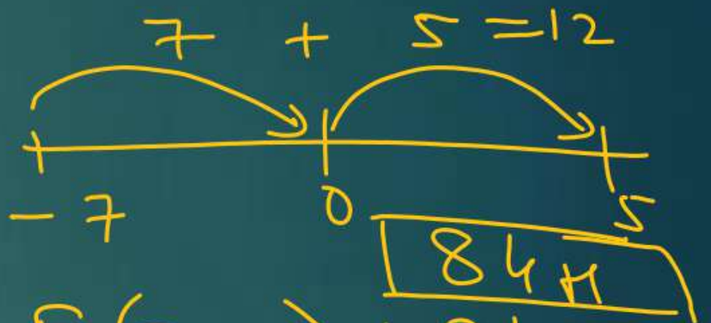
12 min = 84 H

$\Rightarrow 5 \text{ min} = \frac{84}{12} \times 5 = 35 \text{ Hr}$

8 PM (Thurs) − 8 PM (Fri) : 24 H

8 PM (Fri) − 7:00 AM (Sat) 1 H

Correct time = ?



T (8 PM) − F (8 PM) : 24 H

F (8 PM) − Sat (8 PM) : 24 H

Sat (8 PM) − Sun (8 PM) : 24 H

Sun (8 PM) − Mon (8 AM) : 12 H

PYQs

Q.1

[CUET 2026 — 6 June, Shift 1]

घड़ी की सुइयों के बीच 9:20 बजे बनने वाला प्रतिवर्त कोण कितना है?

The reflex angle between the hands of the clock at 9:20 is:

$$\angle = \left|\frac{11}{2}M - 30H\right|$$

$$= \frac{11}{2} \times 20 - 30 \times 9$$

$$= 110 - 270$$

$$= 160°$$

$$\text{Reflex } \angle = 360° - 160°$$

$$= 200°$$

A. 160°

B. 200°

C. 210°

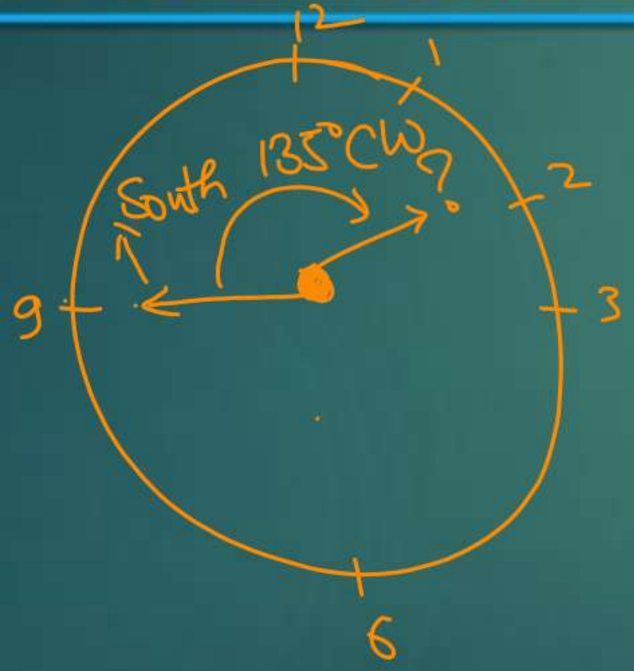
D. 220°

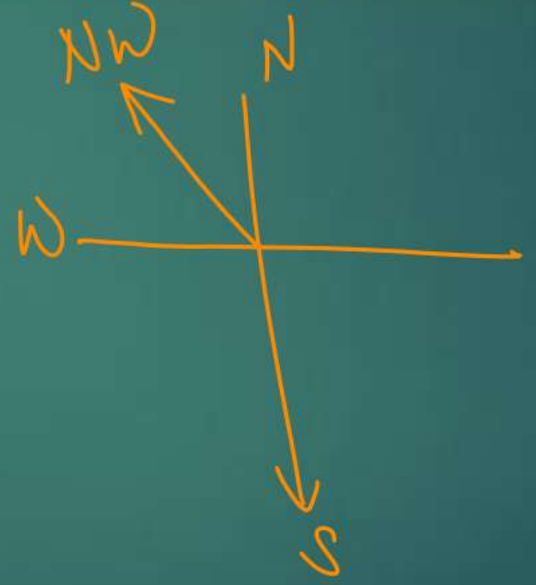
Q.2

[CUET 2026 — 31 May, Shift 1]

एक सही घड़ी में समय 1:45 दिख रहा है। यदि मिनट की सुई दक्षिण दिशा की ओर संकेत कर रही है, तो घंटे की सुई किस दिशा की ओर संकेत करेगी?

An accurate clock is showing the time as 1:45. If the minute hand points towards South, in what direction will the hour hand point?





A. North-East

B. South-West

C. North-West

D. South-East

Q.3

[CUET 2026 — 30 May, Shift 1]

एक साधारण घड़ी की घंटे की सुई लगातार 180 मिनट की अवधि में कितने डिग्री घूमती है?

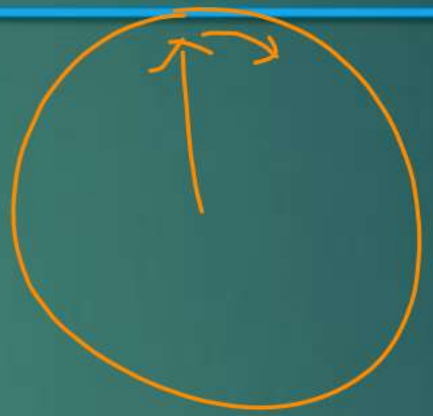
The hour hand of an ordinary clock moves how many degrees in a consecutive span of 180 minutes?

$12 H = 360°$

$1 H = 30°$

$60 \text{ min} = 30°$ ×3

$180 \text{ min} = 90°$ ×3



A. 90°

B. 360°

C. 45°

D. 120°

Q.4

[CUET 2026 — 29 May, Shift 2]

एक सही घड़ी में समय 9:00 है। घंटे की सुई के 140° घूमने के बाद समय क्या होगा?

An accurate clock shows the time as 9:00. After the hour hand has moved to 140°, the time would be:



$360° = 12H$

$140° = \frac{12}{360} \times 140 = \frac{14}{3} = 4\frac{2}{3}$

$\frac{2}{3} \times 60 = 20$

$9:00 \xrightarrow{4\frac{2}{3}} 13\frac{2}{3}$

1:40 //

A. ~~1:40~~

B. 12:00

C. 2:00

D. 11:40

Q.5

[CUET 2026 — 29 May, Shift 1]

एक दिन पियूष ने घड़ी का दर्पण प्रतिबिंब देखा, जिसमें समय 4 घंटे 40 मिनट दिखाई दे रहा था। घड़ी द्वारा दिखाया गया वास्तविक समय क्या था?

One day, Piyush observed the time in the mirror image of the clock as 4 hours and 40 minutes. What is the actual time shown by the clock?

$$\begin{array}{r} 11:60 \\ -\ 4:40 \\ \hline 7:20 \end{array}$$

A. 7 hours 20 minutes

B. 7 hours 40 minutes

C. 8 hours 20 minutes

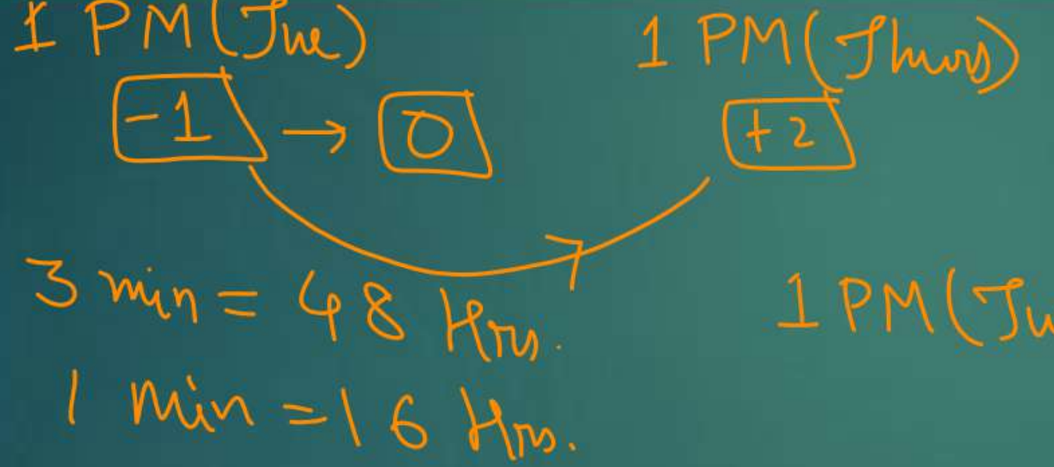
D. 7 hours 30 minutes

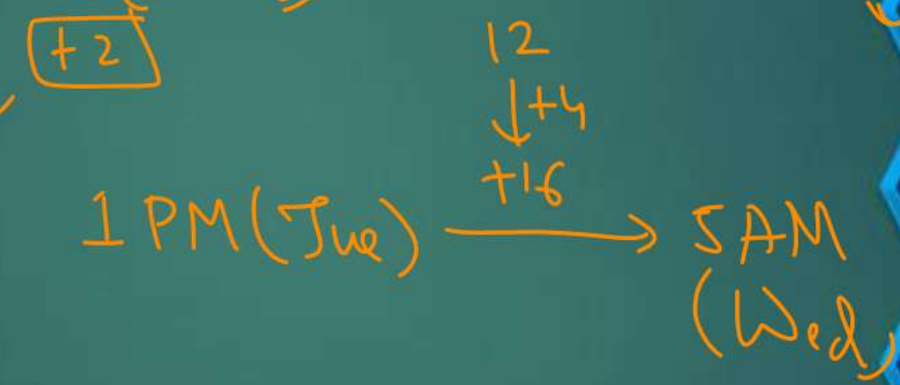
Q.6

[CUET 2026 — 26 May, Shift 1]

एक घड़ी मंगलवार को दोपहर 1 बजे 1 मिनट धीमी है और गुरुवार को दोपहर 1 बजे 2 मिनट तेज है। घड़ी ने सही समय कब दिखाया था?

A watch is 1 minute slow at 1 p.m. on Tuesday and 2 minutes fast at 1 p.m. on Thursday. When did it show the correct time?





A. 5 a.m. on Wednesday

B. 1 p.m. on Wednesday

C. 1 a.m. on Wednesday

D. 5 p.m. on Wednesday

Q.7

[CUET 2026 — 25 May, Shift 2]

एक सही घड़ी की घंटे की सुई 7 बजे से 3 बजे तक कितने डिग्री का कोण तय करती है?

Find the angle traced by the hour hand of a correct clock between 7 o'clock and 3 o'clock.

$12H = 360°$

$1H = 30°$

$8H = 240°$



A. 180°

B. 210°

C. 240°

D. 270°

Q.8

[CUET 2026 — 25 May, Shift 1]

एक साधारण घड़ी की मिनट की सुई ठीक 2 घंटे 20 मिनट की अवधि में कितने डिग्री घूमेगी?

In an ordinary clock, the minute hand would have moved how many degrees over a period of exactly 2 hours and 20 minutes?

$60M = 360°$

$1M = 6°$

$140M = 6 \times 140° = 840°$

$120 + 20 = 140 \text{ min}$

A. 320°

B. 520°

C. 840°

D. 140°

Q.9

[CUET 2026 — 24 May, Shift 1]

एक घड़ी प्रत्येक 2 घंटे में 15 सेकंड तेज हो जाती है। यदि इसे रविवार को शाम 5 बजे सही समय पर सेट किया गया, तो सोमवार को सुबह 9 बजे घड़ी में क्या समय होगा?

A clock becomes fast by 15 seconds in every 2 hours. If it is set correct at 5 P.M. on Sunday, what will be the time on the clock on Monday at 9 A.M.?

$2H = 15$ sec. $\times 8$

$16H = 120$ sec

$= 2$ min

5 PM (Sun) ↓ 9 AM (Mon)

$12 + 4 = 16$

A. 9:02 A.M.

B. 9:03 A.M.

C. 9:04 A.M.

D. 9:05 A.M.

Q.10

[CUET 2026 — 22 May, Shift 2]

3:06 बजे घड़ी की घंटे और मिनट की सुइयों के बीच कितना कोण बनता है?

At 3:06, the hour hand and minute hand of a clock form an angle of:

$$\angle = \left|\frac{11}{2} \times 6 - 30 \times 3\right|$$

$$= 33 - 90$$

$$= 57^\circ$$

A. 61°

B. 58°

C. 57°

D. 60°

Q.11

[CUET 2026 — 21 May, Shift 1]

एक साधारण घड़ी की घंटे की सुई लगातार 1230 मिनट की अवधि में कितने डिग्री घूमेगी?

The hour hand of an ordinary clock would have moved how many degrees in a continuous period of 1230 minutes?

$12\,H = 360°$

$1\,H = 30°$

$60\ min = 30°$

$1230\ min = \frac{30}{60} \times 1230 = \frac{1}{2} \times 1230 = 615°$

A. 307.5°

B. 600°

C. 615°

D. 630°

[CUET 2025 — 29 May, Shift 1]

Q.12

दर्पण में देखने पर घड़ी में समय 3:30 दिखाई देता है। उस क्षण वास्तविक समय ज्ञात कीजिए।

By looking in a mirror, it appears that it is 3:30 in the clock. Determine the real time at that instant moment.

$$\begin{array}{r} 11:60 \\ -\ 3:30 \\ \hline 8:30 \end{array}$$

A. 9:30

B. 6:42

C. 9:32

D. 8:30

Q.13

[CUET 2025 — 29 May, Shift 1]

एक साधारण घड़ी प्रतिदिन 16 मिनट तेज हो जाती है। यदि इसे सुबह 9:00 बजे सही समय पर सेट किया गया, तो उसी दिन शाम 6:00 बजे यह क्या समय दिखाएगी?

An ordinary clock becomes 16 minutes fast every day. If it is set right at 9:00 in the morning, then what time will it show at 6:00 in the evening on the same day?

$24\,H = 16\,min$

$9\,H = \frac{\cancel{16}^{2}}{\cancel{24}_{3}} \times \cancel{9}^{3} = 6$

A. 6:06

B. 6:05

C. 6:07

D. 6:12

Q.14

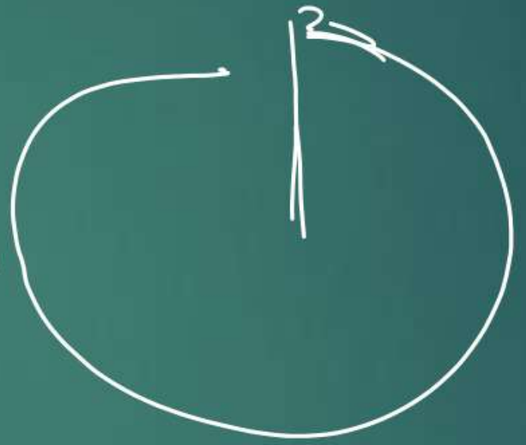
[CUET 2025 — 27 May, Shift 2]

मिनट की सुई के 240° घूमने में घंटे की सुई कितने डिग्री घूमेगी?

How many degrees will the hour hand move, in the time within which the minute hand moves 240°?

$360° = 60$ min

$240° = \frac{60}{360_6} \times 240^{40} = 40$ min



$12H = 360°$

$1H = 30°$

60 min $= 30°$

40 min $= \frac{30}{60} \times 40^{20} = 20°$

A. 20°

B. 18°

C. 24°

D. 22°

Q.15

[CUET 2025 — 20 May, Shift 1]

24 घंटे की लगातार अवधि में एक साधारण घड़ी की दोनों सुइयाँ कितनी बार समकोण पर होती हैं?

How many times in a continuous period of 24 hours are the two hands of an ordinary clock at right angles?

12 H → 22 times

× 2

24 H → 44 times

A. 22 times

B. 12 times

C. ~~44~~ times

D. 48 times

Q.16 [CUET 2025 — 16 May, Shift 1]

सूची-I को सूची-II से सुमेलित कीजिए:

(A) 2:20 p.m. (I) 35° (B) 3:10 p.m. (II) 40°

(C) 5:30 p.m. (III) 50° (D) 6:40 p.m. (IV) 15°

Match List-I with List-II:

(A) 2:20 p.m. (I) 35° (B) 3:10 p.m. (II) 40°

(C) 5:30 p.m. (III) 50° (D) 6:40 p.m. (IV) 15°

(A) $\angle = \frac{11}{2} \times 20 - 30 \times 2 = 50°$

(B) $\angle = \frac{11}{2} \times 10 - 30 \times 3 = 35°$

A. (A)-(III), (B)-(I), (C)-(II), (D)-(IV)

B. (A)-(III), (B)-(IV), (C)-(I), (D)-(II)

C. (A)-(III), (B)-(I), (C)-(IV), (D)-(II)

D. (A)-(III), (B)-(IV), (C)-(II), (D)-(I)

Q.17

[CUET 2025 — 13 May, Shift 2]

शाम 6 बजे से 7 बजे के बीच, घड़ी की मिनट की सुई घंटे की सुई से 3 मिनट आगे किस समय होगी?

Between 6 p.m. and 7 p.m., the minute hand of a clock will be ahead of the hour hand by 3 minutes at:

"Comment"

A. 6:20 p.m.

B. 6:24 p.m.

C. 6:36 p.m.

D. 6:48 p.m.

Q.18

[CUET 2024]

जब समय सवा 3 बजे हो, तब घड़ी की घंटे और मिनट की सुइयों द्वारा बनाया गया कोण कितना होगा?

What will be the measurement of the angle made by the hour and minute hands of a clock when the time is quarter past 3?

3:15

$\theta = \frac{11}{2} \times 15 - 30 \times 3$

$= 82.5 - 90$

$= 7.5°$

A. 6½°

B. 10°

C. 7½°

D. 8½°

Q.19

[CUET 2024]

दर्पण में एक घड़ी 'सात बजने में पंद्रह मिनट' दिखाती है। घड़ी द्वारा दिखाया गया सही समय क्या है?

A clock seen through a mirror shows 'quarter to seven'. What is the correct time shown by the clock?

6:45

11:60
-6:45
5:15

A. 6:15

B. 6:17

C. 5:17

D. 5:15

Q.20

[CUET 2023 — 5 June, Shift 2]

5:30 और 6 बजे के बीच किस समय घड़ी की सुइयाँ समकोण पर होंगी?

At what time between 5:30 and 6 o'clock will the hands of a clock be at right angle?

$+90°, \quad -90°$

A. 45 min past 5

B. 40 min past 5

C. 43 7/11 min past 5

D. 43 3/11 min past 5

Thank You