

# Clock

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1. At what time between 3 and 4 o'clock are the hands of a clock together?

- A) 3:16 and  $4/11$
- B) 3:15 and  $3/11$
- C) 3:17 and  $5/11$
- D) 3:14 and  $2/11$

Answer: A) 3:16 and  $4/11$

2. What is the angle between the two hands of a clock at 4:20?

- A)  $0^\circ$
- B)  $5^\circ$
- C)  $10^\circ$
- D)  $20^\circ$

Answer: C)  $10^\circ$

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

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

Answer: C) 22

4. A clock is started at noon. By 10 minutes past 5, the hour hand has turned through:

- A)  $145^\circ$
- B)  $150^\circ$
- C)  $155^\circ$
- D)  $160^\circ$

Answer: C)  $155^\circ$

5. At what angle are the hands of a clock inclined at 15 minutes past 5?

A)  $58.5^\circ$

B)  $64^\circ$

C)  $67.5^\circ$

D)  $72.5^\circ$

Answer: C)  $67.5^\circ$

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

A) 20

B) 22

C) 24

D) 48

Answer: B) 22

7. A watch which gains 5 seconds in 3 minutes was set right at 7 a.m. In the afternoon of the same day, when the watch indicated a quarter past 4 o'clock, the true time is:

A) 4 p.m.

B) 3:45 p.m.

C) 4:15 p.m.

D) 4:30 p.m.

Answer: A) 4 p.m.

8. The reflex angle between the hands of a clock at 10:25 is:

A)  $180^\circ$

B)  $192.5^\circ$

C)  $195^\circ$

D)  $197.5^\circ$

Answer: D)  $197.5^\circ$

9. At what time between 9 and 10 o'clock will the hands of a watch be together?

A) 9:49 1/11

B) 9:48 2/11

C) 9:50 1/11

D) 9:47 3/11

Answer: A) 9:49 1/11

10. How many degrees does the minute hand cover in the same time the hour hand covers 10 degrees?

A)  $60^\circ$

B)  $120^\circ$

C)  $100^\circ$

D)  $80^\circ$

Answer: B)  $120^\circ$

11. What is the angle between the minute hand and the hour hand of a clock at 8:30?

A)  $60^\circ$

B)  $75^\circ$

C)  $80^\circ$

D)  $90^\circ$

Answer: B)  $75^\circ$

12. A clock gains 15 minutes per day. It is set right at 12 noon. What time will it show at 4 a.m. the next day?

A) 4:10 a.m.

B) 4:15 a.m.

C) 4:20 a.m.

D) 4:30 a.m.

Answer: A) 4:10 a.m.

13. The angle between the hands of a clock is  $120^\circ$ . If the hour hand is at 2, what is the time?

A) 2:20

B) 2:25

C) 2:30

D) 2:35

Answer: A) 2:20

14. How much time does the minute hand of a clock take to describe an angle of  $2\pi/3$  radians?

A) 15 minutes

B) 20 minutes

C) 25 minutes

D) 30 minutes

Answer: B) 20 minutes

15. At what time between 2 and 3 o'clock will the hands of a clock be at a right angle?

A) 2:27 3/11

B) 2:25 5/11

C) 2:28 4/11

D) 2:26 2/11

Answer: A) 2:27 3/11

16. A clock loses 5 minutes every hour and is set right at 8 a.m. on a Monday. When will it show the correct time again?

A) 8 a.m. on Tuesday

B) 8 a.m. on Wednesday

C) 8 a.m. on Thursday

D) 8 a.m. on Friday

Answer: B) 8 a.m. on Wednesday

17. Through how many degrees does the hour hand of a clock turn in 20 minutes?

A)  $5^\circ$

B)  $10^\circ$

C)  $12^\circ$

D)  $15^\circ$

Answer: B)  $10^\circ$

18. What is the time when the hands of a clock are in the ratio 1:5 between 4 and 5 o'clock?

- A) 4:21 9/11
- B) 4:22 8/11
- C) 4:23 7/11
- D) 4:24 6/11

Answer: A) 4:21 9/11

19. At what time between 7 and 8 o'clock are the hands of a clock in a straight line, but not together?

- A) 7:05 5/11
- B) 7:06 4/11
- C) 7:07 3/11
- D) 7:08 2/11

Answer: A) 7:05 5/11

20. A watch which gains uniformly is 2 minutes slow at noon on Monday and is 4 min 48 sec fast at 2 p.m. on the following Monday. When was it correct?

- A) 2 p.m. on Tuesday
- B) 2 p.m. on Wednesday
- C) 3 p.m. on Thursday
- D) 1 p.m. on Friday

Answer: B) 2 p.m. on Wednesday

21. Find the angle between the hour hand and the minute hand of a clock when the time is 3:25.

- A)  $45^\circ$
- B)  $47.5^\circ$
- C)  $50^\circ$
- D)  $52.5^\circ$

Answer: B)  $47.5^\circ$

22. How many times are the hands of a clock at a right angle in 12 hours?

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

Answer: A) 22

23. A clock is set right at 5 a.m. The clock loses 16 minutes in 24 hours. What will be the true time when the clock indicates 10 p.m. on the 4th day?

- A) 11 p.m.
- B) 10:45 p.m.
- C) 11:15 p.m.
- D) 11:30 p.m.

Answer: A) 11 p.m.

24. The minute hand of a clock overtakes the hour hand at intervals of 65 minutes of the correct time. How much a day does the clock gain or lose?

- A) 10 10/143 min gain
- B) 10 10/143 min loss
- C) 11 10/143 min gain
- D) 11 10/143 min loss

Answer: A) 10 10/143 min gain

25. What is the time shown by the mirror if the real time is 5:45?

- A) 6:15
- B) 7:15
- C) 6:45
- D) 7:45

Answer: A) 6:15

26. At what time between 5:30 and 6:00 will the hands of a clock be at a right angle?

- A) 5:43 7/11
- B) 5:44 6/11

C) 5:45 5/11

D) 5:46 4/11

Answer: A) 5:43 7/11

27. The hands of a clock are 4 minutes apart. What is the angle between them?

A)  $20^\circ$

B)  $24^\circ$

C)  $28^\circ$

D)  $32^\circ$

Answer: B)  $24^\circ$

28. A clock shows 8 o'clock in the morning. Through how many degrees will the hour hand rotate when the clock shows 2 o'clock in the afternoon?

A)  $120^\circ$

B)  $150^\circ$

C)  $180^\circ$

D)  $210^\circ$

Answer: C)  $180^\circ$

29. If a clock strikes once at 1 o'clock, twice at 2 o'clock and so on, how many times will it strike in 24 hours?

A) 78

B) 156

C) 182

D) 196

Answer: B) 156

30. At what time are the hands of a clock 7 minutes apart between 3 and 4 o'clock?

A) 3:09 9/11

B) 3:25 1/11

C) Both A and B

D) None of the above

Answer: C) Both A and B

31. A clock is set right at 1 p.m. If it gains 1 minute in an hour, then what is the true time when the clock indicates 6 p.m. the same day?

- A) 5:55 p.m.
- B) 5:56 p.m.
- C) 5:57 p.m.
- D) 5:58 p.m.

Answer: A) 5:55 p.m.

32. The angle traced by the hour hand of a correct clock between 3 o'clock and 7 o'clock is:

- A)  $100^\circ$
- B)  $120^\circ$
- C)  $150^\circ$
- D)  $180^\circ$

Answer: B)  $120^\circ$

33. How many seconds will a clock lose in 24 hours, if its hands coincide every 64 minutes?

- A)  $32 \frac{8}{11}$  sec
- B)  $33 \frac{7}{11}$  sec
- C)  $34 \frac{6}{11}$  sec
- D)  $35 \frac{5}{11}$  sec

Answer: A)  $32 \frac{8}{11}$  sec

34. At what time between 4 and 5 o'clock will the hands of a watch point in opposite directions?

- A)  $4:54 \frac{6}{11}$
- B)  $4:55 \frac{5}{11}$
- C)  $4:56 \frac{4}{11}$
- D)  $4:57 \frac{3}{11}$

Answer: A)  $4:54 \frac{6}{11}$

35. The angle between the two hands of a clock is  $70^\circ$  when the hour hand is between 7 and 8. What time does the clock show?

- A) 7:21 9/11
- B) 7:51 3/11
- C) Both A and B
- D) None of the above

Answer: C) Both A and B

36. An accurate clock shows 7 a.m. Through how many degrees will the hour hand rotate when the clock shows 1 p.m.?

- A)  $150^\circ$
- B)  $180^\circ$
- C)  $210^\circ$
- D)  $240^\circ$

Answer: B)  $180^\circ$

37. A wall clock gains 2 minutes in 12 hours, while a table clock loses 2 minutes every 24 hours. If both are set right at 12 noon on Tuesday, when will they show the same time again?

- A) 12 noon on Wednesday
- B) 12 noon on Thursday
- C) 12:30 p.m. on Thursday
- D) 12 noon on Friday

Answer: B) 12 noon on Thursday

38. The time on a clock is 2:30. If the minute hand points towards the north, in which direction will the hour hand point?

- A) North-West
- B) South-West
- C) North-East
- D) South-East

Answer: A) North-West

39. A clock's hands are in a straight line, but not together, at a time between 1 and 2 o'clock. What is the exact time?

A) 1:38 2/11

B) 1:39 1/11

C) 1:40

D) 1:37 3/11

Answer: A) 1:38 2/11

40. How many rotations will the hour hand of a clock complete in 72 hours?

A) 3

B) 6

C) 9

D) 12

Answer: B) 6

41. A clock is 5 minutes fast at 3 p.m. on Sunday and 3 minutes slow at 5 p.m. on Tuesday. When did it show the correct time?

A) 7 a.m. on Monday

B) 7 p.m. on Monday

C) 8 a.m. on Monday

D) 8 p.m. on Monday

Answer: A) 7 a.m. on Monday

42. How long does the hour hand of a clock take to move through an angle of 30 degrees?

A) 30 minutes

B) 45 minutes

C) 60 minutes

D) 90 minutes

Answer: C) 60 minutes

43. At what time between 8 and 9 o'clock are the hands of a clock at an angle of  $90^\circ$ ?

A) 8:27 3/11

B) 8:52 8/11

C) Both A and B

D) None of the above

Answer: C) Both A and B

44. A clock is set right at noon. What is the time when the hour and minute hands are 18 minutes apart?

A) 12:19 7/11

B) 12:20 6/11

C) 12:21 5/11

D) 12:22 4/11

Answer: A) 12:19 7/11

45. The minute hand of a clock is 10 cm long. Find the area of the face of the clock described by the minute hand between 9 a.m. and 9:35 a.m.

A) 183.33 cm<sup>2</sup>

B) 188.33 cm<sup>2</sup>

C) 193.33 cm<sup>2</sup>

D) 198.33 cm<sup>2</sup>

Answer: A) 183.33 cm<sup>2</sup>

46. What is the angle between the two hands of a clock when the time is 7:35?

A) 15°

B) 17.5°

C) 20°

D) 22.5°

Answer: B) 17.5°

47. A clock which loses uniformly is 5 min fast at 8 o'clock in the morning on Sunday and it is 5 min 48 sec slow at 8 p.m. on the following Sunday. When was the clock correct?

A) Wednesday 7:20 p.m.

B) Thursday 7:20 a.m.

C) Friday 7:20 p.m.

D) Saturday 7:20 a.m.

Answer: A) Wednesday 7:20 p.m.

48. At what time will the minute hand and the hour hand of a clock make an angle of  $180^\circ$  between 6 and 7 o'clock?

A) 6 o'clock

B) 6:01

C) 6:02

D) 6:03

Answer: A) 6 o'clock

49. How many degrees does the hour hand move in one minute?

A)  $0.5^\circ$

B)  $1^\circ$

C)  $5^\circ$

D)  $6^\circ$

Answer: A)  $0.5^\circ$

50. The time on a watch is a quarter to three. If the minute hand points to North-East, in which direction does the hour hand point?

A) South-West

B) North-West

C) South-East

D) North-East

Answer: A) South-West

51. A clock strikes the number of hours. How many strikes does it make in one full day?

A) 156

B) 180

C) 196

D) 204

Answer: A) 156

52. What is the mirror image of the time 12:30?

- A) 12:30
- B) 11:30
- C) 1:30
- D) 6:30

Answer: B) 11:30

53. If the two hands in a clock are 3 minutes divisions apart, then the angle between them is:

- A)  $3^\circ$
- B)  $18^\circ$
- C)  $24^\circ$
- D)  $60^\circ$

Answer: B)  $18^\circ$

54. A clock which gains 1 hour in every 24 hours is set right on Sunday 9 a.m. Then what will be the true time on Tuesday 11 a.m.?

- A) 10 a.m.
- B) 9:30 a.m.
- C) 10:30 a.m.
- D) 9 a.m.

Answer: D) 9 a.m.

55. How many degrees will the minute hand move, in the same time in which the second hand moves  $300^\circ$ ?

- A)  $5^\circ$
- B)  $10^\circ$
- C)  $15^\circ$
- D)  $20^\circ$

Answer: A)  $5^\circ$

56. At what time between 10 and 11 o'clock will the hands of the clock be in the same straight line, but not together?

- A) 10:21 9/11
- B) 10:22 8/11
- C) 10:23 7/11
- D) 10:24 6/11

Answer: A) 10:21 9/11

57. The hands of a correct clock coincide every X minutes. What is the value of X?

- A) 60
- B) 65 5/11
- C) 66 4/11
- D) 67 3/11

Answer: B) 65 5/11

58. What is the angle between the hands of a clock at 1 o'clock?

- A) 0°
- B) 5°
- C) 30°
- D) 60°

Answer: C) 30°

59. A clock is 10 minutes slow. If the clock shows 6:00 p.m., what is the actual time?

- A) 5:50 p.m.
- B) 6:10 p.m.
- C) 6:00 p.m.
- D) 6:20 p.m.

Answer: B) 6:10 p.m.

60. The speed of the hour hand is:

- A) 0.5 degrees/min

B) 1 degree/min

C) 5 degrees/min

D) 6 degrees/min

Answer: A) 0.5 degrees/min

61. What is the angle between the minute hand and the second hand of a clock in 15 seconds?

A)  $90^\circ$

B)  $82.5^\circ$

C)  $75^\circ$

D)  $67.5^\circ$

Answer: B)  $82.5^\circ$

62. At what time between 6 and 7 o'clock are the hands of a clock 5 minutes apart?

A) 6:27 3/11

B) 6:38 2/11

C) Both A and B

D) None of the above

Answer: C) Both A and B

63. The reflection of a wall clock in a mirror shows the time as 3:40. What is the actual time?

A) 8:20

B) 9:20

C) 8:40

D) 9:40

Answer: A) 8:20

64. Through what angle does the minute hand of a clock turn in 45 minutes?

A)  $225^\circ$

B)  $270^\circ$

C)  $315^\circ$

D)  $360^\circ$

Answer: B)  $270^\circ$

65. A clock goes slow by 10 minutes in 24 hours. If it is set at 5 a.m. on a day, what will be the time shown by this clock after 48 hours?

- A) 4:40 a.m.
- B) 4:50 a.m.
- C) 5:10 a.m.
- D) 5:20 a.m.

Answer: A) 4:40 a.m.

66. A watch shows 4:30. If the minute hand points to the East, in which direction will the hour hand point?

- A) North-East
- B) South-East
- C) North-West
- D) South-West

Answer: A) North-East

67. How many degrees does the minute hand gain over the hour hand in one minute?

- A)  $5^\circ$
- B)  $5.5^\circ$
- C)  $6^\circ$
- D)  $6.5^\circ$

Answer: B)  $5.5^\circ$

68. At what time between 12 and 1 o'clock are the hands of a clock in opposite directions?

- A) 12:32  $\frac{8}{11}$
- B) 12:33  $\frac{7}{11}$
- C) 12:34  $\frac{6}{11}$
- D) 12:35  $\frac{5}{11}$

Answer: A) 12:32  $\frac{8}{11}$

69. In a day, how many times the minute hand of a clock is ahead of the hour hand by 90 degrees?

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

Answer: A) 22

70. The angle between the hands of a clock when the time is 10:00 is:

- A)  $30^\circ$
- B)  $60^\circ$
- C)  $90^\circ$
- D)  $120^\circ$

Answer: B)  $60^\circ$

71. A clock loses 2 minutes in an hour. If it's set correctly at 12 noon, what time will it show at 2 p.m.?

- A) 1:56 p.m.
- B) 1:58 p.m.
- C) 2:02 p.m.
- D) 2:04 p.m.

Answer: A) 1:56 p.m.

72. At what time between 1 and 2 o'clock will the hands of a clock be together?

- A)  $1:05 \frac{5}{11}$
- B)  $1:06 \frac{4}{11}$
- C)  $1:07 \frac{3}{11}$
- D)  $1:08 \frac{2}{11}$

Answer: A)  $1:05 \frac{5}{11}$

73. The angle between the minute hand and hour hand of the clock when the time is 6:30 is:

- A)  $0^\circ$

B)  $15^\circ$

C)  $30^\circ$

D)  $45^\circ$

Answer: B)  $15^\circ$

74. A clock that gains 5 minutes every 3 hours is set at 1 p.m. What time will it show at 10 p.m. on the same day?

A) 10:15 p.m.

B) 10:20 p.m.

C) 10:25 p.m.

D) 10:30 p.m.

Answer: A) 10:15 p.m.

75. What time is it when the angle between the hands of a clock is 180 degrees, between 2 and 3 o'clock?

A) 2:43  $\frac{7}{11}$

B) 2:44  $\frac{6}{11}$

C) 2:45  $\frac{5}{11}$

D) 2:46  $\frac{4}{11}$

Answer: A) 2:43  $\frac{7}{11}$

76. In 16 minutes, the minute hand gains over the hour hand by:

A)  $16^\circ$

B)  $80^\circ$

C)  $88^\circ$

D)  $96^\circ$

Answer: C)  $88^\circ$

77. At what time between 11 and 12 o'clock are the hands of a clock at right angles?

A) 11:10  $\frac{10}{11}$

B) 11:43  $\frac{7}{11}$

C) Both A and B

D) None of the above

Answer: C) Both A and B

78. The time shown in a water image of a clock is 8:20. What is the actual time?

A) 10:10

B) 9:10

C) 10:40

D) 9:40

Answer: A) 10:10

79. The hour hand of a clock is 7 cm long. The distance covered by its tip in 2 days is:

A) 88 cm

B) 176 cm

C) 264 cm

D) 352 cm

Answer: B) 176 cm

80. A clock is started at 3 p.m. By 3:40 p.m., the hour hand has turned through:

A)  $15^\circ$

B)  $20^\circ$

C)  $25^\circ$

D)  $30^\circ$

Answer: B)  $20^\circ$

81. When the minute hand covers a distance of 1 hour 20 minutes, then the angular distance covered by it is:

A)  $400^\circ$

B)  $420^\circ$

C)  $480^\circ$

D)  $540^\circ$

Answer: C)  $480^\circ$

82. A faulty clock gains 15 minutes in 24 hours. If it is set right at 10 a.m., what time will it show at 10 p.m. the next day?

- A) 10:18:45 p.m.
- B) 10:20 p.m.
- C) 10:21:15 p.m.
- D) 10:22:30 p.m.

Answer: A) 10:18:45 p.m.

83. What is the angle between the hour and minute hands at 12:40?

- A)  $120^\circ$
- B)  $130^\circ$
- C)  $140^\circ$
- D)  $150^\circ$

Answer: C)  $140^\circ$

84. How many times between 4 a.m. and 4 p.m. will the hands of a clock be at right angles?

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

Answer: A) 22

85. At what time are the hands of a clock 20 minute spaces apart between 7 and 8 o'clock?

- A) 7:21 9/11
- B) 7:51 3/11
- C) Both A and B
- D) None of the above

Answer: C) Both A and B

86. A clock takes 7 seconds to strike 7. How many seconds will it take to strike 10?

- A) 9 seconds
- B) 10 seconds
- C) 10.5 seconds
- D) 11 seconds

Answer: C) 10.5 seconds

87. Find the time between 2 and 3 o'clock when the hands of a clock are 12 minutes apart.

- A) 2:12
- B) 2:24
- C) Both A and B
- D) None of the above

Answer: C) Both A and B

88. If a clock shows 6:30 and the hour hand is pointing West, which direction does the minute hand point?

- A) North
- B) South
- C) East
- D) West

Answer: B) South

89. A watch reads 3:30. If the minute hand points East, the hour hand will point to:

- A) North-East
- B) South-East
- C) North-West
- D) South-West

Answer: B) South-East

90. How many times do the hour and minute hands of a clock form a 30-degree angle in 12 hours?

- A) 22
- B) 24

C) 44

D) 48

Answer: A) 22

91. What is the angle between the hands of a clock at 2:20?

A)  $50^\circ$

B)  $60^\circ$

C)  $70^\circ$

D)  $80^\circ$

Answer: A)  $50^\circ$

92. A clock gains 10 seconds in 3 minutes. It was set right at 9 a.m. What time will it show at 9 p.m. on the same day?

A) 9:10 p.m.

B) 9:20 p.m.

C) 9:30 p.m.

D) 9:40 p.m.

Answer: B) 9:20 p.m.

93. The angle between the hands of a clock is  $60^\circ$ . If the hour hand is at 4, what is the time?

A) 4:21  $9/11$

B) 4:43  $7/11$

C) Both A and B

D) None of the above

Answer: C) Both A and B

94. What is the angle covered by the minute hand in 22 minutes?

A)  $66^\circ$

B)  $110^\circ$

C)  $121^\circ$

D)  $132^\circ$

Answer: D)  $132^\circ$

95. A clock loses 1% time during the first week and then gains 2% time during the next one week. If the clock was set right at 12 noon on a Sunday, what will be the time that the clock will show exactly 14 days from the time it was set right?

- A) 12:00 noon
- B) 12:02:24 p.m.
- C) 12:04:48 p.m.
- D) 12:07:12 p.m.

Answer: B) 12:02:24 p.m.

96. A clock set at 4 a.m. shows 4:10 at the actual time of 4:05 a.m. on the same day. At what time will the clock show 8:30 p.m. on the next day?

- A) 8:00 p.m.
- B) 8:15 p.m.
- C) 8:30 p.m.
- D) 8:45 p.m.

Answer: A) 8:00 p.m.

97. What is the angle between the two hands of a clock at 9:15?

- A)  $150^\circ$
- B)  $157.5^\circ$
- C)  $165^\circ$
- D)  $172.5^\circ$

Answer: B)  $157.5^\circ$

98. A clock is set to show the correct time at 12 noon. It gains 12 minutes in 12 hours. What will be the true time when the clock shows 1:30 a.m. on the next day?

- A) 1:15 a.m.
- B) 1:17 a.m.
- C) 1:19 a.m.
- D) 1:21 a.m.

Answer: D) 1:21 a.m.

99. At what time do the hands of a clock between 7:00 and 8:00 form a 45-degree angle?

- A) 7:30
- B) 7:46  $\frac{4}{11}$
- C) Both A and B
- D) None of the above

Answer: C) Both A and B

100. How many times will the hands of a clock be 15 minutes apart in 24 hours?

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

Answer: A) 44