CLOCK

Directions: (1 to 7) The questions given below are based on a vertical mirror and a clock. The clock has dots on its dial and not numbers written on it. Read the questions carefully and find out the real/reflected time.

1. If the real time is 4 : 40, then what is the time shown by the reflection?
   (a) 7 : 20   (b) 2 : 50
   (c) 6 : 20   (d) 7 : 50

2. If the time shown by the reflection is 2 : 40, then what is the real time?
   (a) 11 : 40   (b) 5 : 45
   (c) 9 : 20   (d) 11 : 20

3. If the real time is 7 : 45, then what is the time shown by the reflection?
   (a) 4 : 15   (b) 5 : 15
   (c) 11 : 45   (d) 1 1 : 15

4. If the real time is 12 : 30, then what is the time shown by the reflection?
   (a) 12 : 30   (b) 11 : 30
   (c) 6 : 30   (d) 1 : 30

5. If the time by any clock is 7 o'clock, what is the reflected time?
   (a) 12 : 30   (b) 5 : 00
   (c) 6 : 30   (d) 12 : 20

6. If the real time is 11 : 35, then what is the time shown by the reflection?
   (a) 12 : 25   (b) 11 : 25
   (c) 1 : 25   (d) 1 : 55

7. If the time shown by the reflection is 12 : 25, then what is the real time?
   (a) 12 : 25   (b) 12 : 35
   (c) 11 : 35   (d) 10 : 35

8. If on the dail of a clock, we substitute the numbers with the reversed order of alphabets K to V so that 'V' substitutes '5' and 'U' substitutes '6' and the process is continued, then which alphabet will come in place of 11?
   (a) Q   (b) O
   (c) M   (d) P

9. At what time between 4 and 5 o'clock are the hands of a clock together?

   (a) 20 min. past 4   (b) $21\frac{9}{11}$ min. past 4

   (c) $21\frac{4}{11}$ min *past* 4   (d) 44 $\frac{10}{11}$

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

    (a) $16\frac{5}{11}$ min past 3   (b) $16\frac{7}{11}$ min past 3

    (c) $16\frac{4}{11}$ min past 3   (d) None of these

11. At what time between 5 and 6 are the hands of a clock coinciding each other ?
    (a) 22 minutes past 5   (b) 30 minutes past 5

    (c) $22\frac{8}{11}$ min *past* 5   (d) $27\frac{3}{11}$ min past 5

12. At what time between 9 and 10 will the hands of a clock be togefther?
    (a) 45 minutes past 9   (b) 50 minutes past 9

    (c) $49\frac{1}{11}$ min *past* 9   (d) $48\frac{2}{11}$ min past 9

13. At what time between 8 and 9 will the hands of a clock be togefther?
    (a) 40 minutes past 8

    (b) $43\frac{7}{11}$ minutes past 8

    (c) $43\frac{8}{11}$ minutes past 8

    (d) $44\frac{10}{11}$ minutes past 8

14. At what time, are the hands of a clock together between 2 and 3?

    (a) $10\frac{9}{11}$ min past 2   (b) $10\frac{10}{11}$ min past 2

    (c) $10\frac{8}{11}$ min past 2   (d) None of these

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

(a) $10\dfrac{10}{11}$ min past 5   (b) $10\dfrac{9}{10}$ min *past*5

(c) $11\dfrac{10}{11}$ min *past*5   (d) None of these

16. At which of the follwing times between 3 and 4 o'clock when the angle between the hands of a watch is one-third of a right angle.

(a) $10\dfrac{10}{11}$ min past 3   (b) $10\dfrac{9}{11}$ min past 3

(c) $11\dfrac{9}{11}$ min past 3   (d) $21\dfrac{8}{11}$ min past 3

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

(a) 24 times   (b) 48 times

(c) 22 times   (d) 44 times

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

(a) 48 times   (b) 24 times

(c) 44 times   (d) 22 times

19. How many times do the hands of a clock point opposite to each other in 12 hours?

(a) 6 times   (b) 10 times

(c) 11 times   (d) 12 times

20. How many times in a day both hands of clock overlap to each other?

(a) 24 times   (b) 20 times

(c) 21 times   (d) 22 times

21. How many times in 36 hours both hands of clock overlap to each other?

(a) 36 times   (b) 33 times

(c) 66 times   (d) 22 times

22. How many times do the hands of a clock point opposite each other between 4 to 6 p.m.

(a) 2 times   (b) 1 times

(c) 3 times   (d) 4 times

23. At what angle are the two hands of a clock inlined at 15 minutes past 10?

(a) 150^0 (b) $157\dfrac{1}{2}$

(c) $142\dfrac{1}{2}$ (d) None of these

24. At what angle are the two hands of a clock inlined at 10 minutes past 11?

(a) 90^0 (b) $85°$

(c) $95°$ (d) None of these

25. what is maxmum angle made by the two hands of a clock inlined at 20 minutes past 7?

(a) 100^0 (b) $260°$

(c) $60°$ (d) $90°$

26. Find the angle between the two hands of a clock of 15 minutes past 4 o'clock.

(a) 38.5^0 (b) 36.5^0

(c) 37.5^0 (d) None of these

27. Find the angle between the two hands of a clock at 4.30 pm.

(a) 45^0 (b) 30^0

(c) 60^0 (d) None of these

28. At what angle are the two hands of a clock inlined at 20 minutes past 5?

(a) 30^0 (b) 45^0

(c) 50^0 (d) 40^0

29. At what angle are the two hands of a clock inclined at 32 minutes past 9?

(a) 94^0 (b) 95^0

(c) 93^0 (d) 92^0

30. At what angle are the two hands of a clock inclined at 17 minutes past 9?

(a) $167\dfrac{1^0}{2}$ (b) $172\dfrac{1^0}{2}$

(c) $166\dfrac{1^0}{2}$ (d) $176\dfrac{1^0}{2}$

31. At what angle are the two hands of a clock inclined at 38 minutes past 7?

(a) $1\dfrac{1^0}{2}$ (b) 02^0

(c) 03^0 (d) 01^0

32. At what angle are the two hands of a clock inclined at 48 minutes past 12?

(a) 264^0 (b) 263^0

(c) 265^0 (d) 266^0

33. At what angle are the two hands of a clock inclined at 4 minutes to 12?

(a) 22^0 (b) 20^0

(c) 21^0 (d) 23^0

34. At what times are the hands of a clock at $100°$ after 6 o'clock?

(a) $50\dfrac{10}{11}$ min. past 6   (b) $40\dfrac{10}{11}$ min. past 6

(c) $14\frac{6}{11}$ min. past 6   (d) None of these

35. At what times are the hands of a clock at 100° after 6:30 o'clock?

(a) $50\frac{10}{11}$ min. past 6   (b) $40\frac{10}{11}$ min. past 6

(c) $14\frac{6}{11}$ min. past 6   (d) None of these

36. At what times are the hands of a clock at 135° after 3 o'clock?

(a) $40\frac{10}{11}$ min. past 3   (b) $15\frac{10}{11}$ min. past 3

(c) 37 min. past 3   (d) None of these

37. Find at what time between 8 and 9 o'clock will the hands of a clock be in the same straight line but not together.

(a) $10\frac{10}{11}$ min past 8   (b) $10\frac{9}{11}$ min past 8

(c) $11\frac{10}{11}$ min past 8   (d) None of these

38. At what times are the hands of a clock at right angles between 7 am and 8 am?

(a) $54\frac{6}{11}$ min past 7, $21\frac{9}{11}$ min past 7

(b) $52\frac{5}{11}$ min past 7, $21\frac{8}{11}$ min past 7

(c) $56\frac{6}{11}$ min past 7, $21\frac{8}{11}$ min past 7

(d) None of these

39. At which of the following times between 10 and 11 o'clock will the hand of clock be at right angle?

(a) $38\frac{2}{11}$ min past 10   (b) $6\frac{5}{11}$ min past 10

(c) $38\frac{3}{11}$ min past 10   (d) $8\frac{2}{11}$ min past 10

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

(a) $43\frac{5}{11}$ min past 5,   (b) $43\frac{7}{11}$ min past 5

(c) 40 min. past 5   (d) 45 min. past 5

41. Find at what time between 2 and 3 o'clock will

the hands of a clock be in the same straight line but not together.

(a) $43\frac{6}{11}$ min past 2   (b) $43\frac{7}{11}$ min past 2

(c) $43\frac{3}{11}$ min past 2   (d) None of these

42. Find at what time between 9 and 10 o'clock will the hands of a clock be in the same straight line but not together.

(a) $16\frac{4}{11}$ min past 9   (b) $16\frac{5}{11}$ min past 9

(c) $16\frac{3}{11}$ min past 9   (d) None of these

43. At which of the following times between 5 and 6 are the hands of a clock 3 minutes a part?

(a) 24 min. past 5   (b) 26 min. past 5

(c) $30\frac{5}{11}$ min past 5   (d) 22 min past 5

44. At which of the following times between 4 and 5 are the hands of a clock 3 minutes a part?

(a) $18\frac{6}{11}$ min past 4   (b) $26\frac{5}{11}$ min past 4

(c) $25\frac{5}{11}$ min past 4   (d) $25\frac{3}{11}$ min past 4

45. At what time between 3 and 4 is the minutehand 7 minutes ahead of the hour-hand?

(a) $8\frac{8}{11}$ min past 3   (b) 24 min past 3

(c) 25 min past 3   (d) 22 min past 3

46. At what time between 3 and 4 is the minutehand 4 minutes behind the hour-hand?

(a) 12 min past 3   (b) 11 min past 3

(c) 19 min past 3   (d) None of these

47. The minute hand of a clock overtakes the hour hand at intervals of 63 minutes of correct time. How much a day does the clock gain or lose?

(a) $56\frac{8}{77}$ min gain   (b) $56\frac{8}{77}$ min lose

(c) $57\frac{8}{77}$ min gain   (d) $57\frac{8}{77}$ min lose

48. How much does a watch gain or lose per day, if its hands coincide every 64 minutes of correct time?

(a) $32\frac{8}{11}$ min gain   (b) $31\frac{8}{11}$ min gain

(c) $32\frac{3}{11}$ min gain   (d) $32\frac{8}{11}$ min lose

49. A watch which gains uniformly, is 5 min slow at 8 o'clock in the morning on Sunday, and is 5 min 48 sec fast at 8 pm on following Sunday. When was it correct?

(a) 20 min past 7 pm on Tuesday

(b) 20 min past 7 pm on Wednesday

(c) 10 min past 7 pm on Tuesday

(d) 10 min past 7 pm on Wednesday

50. A clock is set right at 8 am. The clock gains 10 minutes in 24 hours. What will be the true time when the clock indicates 1 pm on the following day?

(a) 28 hrs   (b) 28 hrs 48 min

(c) 28 hrs 42 min   (d) None of these

ANSWERS

1.(a)	2. (c)	3. (a)	4. (b)	5. (b)	6. (a)	7. (c)	8. (d)	9. (b)	10. (c)	11. (d)	12. (c)	13. (b)
14. (b)	15. (a)	16. (a)	17. (d)	18. (c)	19. (c)	20. (d)	21. (b)	22. (b)	23. (c)	24. (b)	25. (b)	26. (c)
27. (a)	28.(d)	29. (a)	30. (d)	31. (d)	32. (a)	33. (a)	34. (c)	35. (a)	36. (a)	37. (a)	38. (a)	39. (a)
40. (b)	41. (b)	42. (a)	43. (a)	44. (a)	45. (b)	46. (d)	47. (d)	48. (a)	49. (b)	50. (b)		