

## Calendar & Clock

1. On 8th Feb, 2005 it was Tuesday. What was the day of the week on 8th Feb, 2004?

A.Tuesday

B.Monday

C.Sunday

D.Wednesday

Answer: Option C=Sunday

Explanation:

The year 2004 is a leap year. It has 2 odd days.

The day on 8th Feb, 2004 is 2 days before the day on 8th Feb, 2005.

Hence, this day is Sunday.

2.The calendar for the year 2007 will be the same for the year:

A.2014

B.2016

C.2017

D.2018

**Answer: Option D=2018**

**Explanation:**

Count the number of odd days from the year 2007 onwards to get the sum equal to 0 odd day.

Year : 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017

Odd day : 1 2 1 1 1 2 1 1 1 2 1

Sum = 14 odd days 0 odd days.

Calendar for the year 2018 will be the same as for the year 2007.

3. January 1, 2008 is Tuesday. What day of the week lies on Jan 1, 2009?

A. Monday

B. Wednesday

C. Thursday

D. Sunday

**Answer: Option C=Thursday**

**Explanation:**

The year 2008 is a leap year. So, it has 2 odd days.

1st day of the year 2008 is Tuesday (Given)

So, 1st day of the year 2009 is 2 days beyond Tuesday.

Hence, it will be Thursday.

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

A. 22

B. 24

C. 44

D. 48

**Answer: Option C=44**

**Explanation:**

In 12 hours, they are at right angles 22 times.

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

5. What is the angle between the hour and minute hand at 3:40?

A. 135

B. 130

C. 120

D. 125

**ANSWER: B = 130**

**Explanation:**

When minute hand is behind the hour hand, the angle between the minute hand and hour hand

at M minutes past H hours is given by:

$$\Rightarrow 30 * (H - M/5) + M/2$$

When minute hand is ahead of hour hand, the formula becomes:

$$\Rightarrow 30 * (M/5 - H) - M/2$$

Applying the second formula as here the minutes hand is ahead of the hour hand.

$$\Rightarrow 30 * (40/5 - 3) - 40/2$$

$$\Rightarrow 30 * (8 - 3) - 20$$

$$\Rightarrow 30 * 5 - 20$$

$$\Rightarrow 150 - 20$$

$$\Rightarrow 130$$

Thus the angle formed is 130 degrees.