## 2001 Q1

1. Casey's shop class is making a golf trophy. He has to paint 300 dimples on a golf ball. If it takes him 2 seconds to paint one dimple, how many minutes will he need to do his job?

(A) 4 (B) 6 (C) 8 (D) 10 (E) 12

1. (D) At 2 seconds per dimple, it takes $300 \times 2 = 600$ seconds to paint them. Since there are 60 seconds in a minute, he will need $600 \div 60 = 10$ minutes.

## 2007 Q1

1. Theresa's parents have agreed to buy her tickets to see her favorite band if she spends an average of 10 hours per week helping around the house for 6 weeks. For the first 5 weeks she helps around the house for 8, 11, 7, 12 and 10 hours. How many hours must she work during the final week to earn the tickets?

**(A)** 9 **(B)** 10 **(C)** 11 **(D)** 12 **(E)** 13

1. **(D)** The first 5 weeks Theresa works a total of $8+11+7+12+10 = 48$ hours. She has promised to work $6 \times 10 = 60$ hours. She must work $60 - 48 = 12$ hours during the final week.

**2016 Q1**

1. The longest professional tennis match ever played lasted a total of 11 hours and 5 minutes. How many minutes was this?

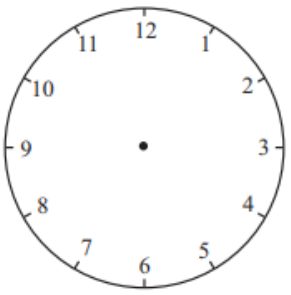
**(A)** 605 **(B)** 655 **(C)** 665 **(D)** 1005 **(E)** 1105

1. Answer (C):

There are 60 minutes in 1 hour, so 11 hours plus 5 minutes is equal to $11 \cdot 60 + 5 = 665$ minutes.

**1999 Q2**

2. What is the degree measure of the smaller angle formed by the hands of a clock at 10 o'clock?




**(A)** 30 **(B)** 45 **(C)** 60

**(D)** 75 **(E)** 90

2. **Answer (C):** There are 360°(degrees) in a circle and twelve spaces on a clock. This means that each space measures 30°. At 10 o'clock the hands point to 10 and 12. They are two spaces or 60° apart.

**1994 Q3**

3. Each day Maria must work 8 hours. This does not include the 45 minutes she takes for lunch. If she begins working at 7:25 A.M. and takes her lunch break at noon, then her working day will end at

(A) 3:40 P.M. (B) 3:55 P.M. (C) 4:10 P.M.
(D) 4:25 P.M. (E) 4:40 P.M.

3. (C) Maria's working day ends 8 hours and 45 minutes later than 7:25 A.M. Eight hours later than 7:25 A.M. is 3:25 P.M. Forty-five minutes later than 3:25 P.M. is 4:10 P.M.

**OR**

| | |
|---|---|
| 7:25 A.M. | begin |
| +8:00 | work time |
| + :45 | lunch time |
| 15:70 = 16:10 = 4:10 P.M. | end |

**OR**

Maria's total time at work including lunch is 15 minutes less than 9 hours. Nine hours later than 7:25 A.M. is 4:25 P.M. Fifteen minutes before 4:25 P.M. is 4:10 P.M.

**2008 Q3**

3. If February is a month that contains Friday the $13^{th}$, what day of the week is February 1 ?


**(A)** Sunday **(B)** Monday **(C)** Wednesday **(D)** Thursday **(E)** Saturday

3. **Answer (A):** A week before the $13^{th}$ is the $6^{th}$, which is the first Friday of the month. Counting back from that, the $5^{th}$ is a Thursday, the $4^{th}$ is a Wednesday, the $3^{rd}$ is a Tuesday, the $2^{nd}$ is a Monday, and the $1^{st}$ is a Sunday.

OR

Counting forward by sevens, February 1 occurs on the same day of the week as February 8 and February 15. Because February 13 is a Friday, February 15 is a Sunday, and so is February 1.

**2012 Q3**

3. On February 13 *The Oshkosh Northwester* listed the length of daylight as 10 hours and 24 minutes, the sunrise as 6:57 AM, and the sunset as 8:15 PM. The length of daylight and sunrise were correct, but the sunset was wrong. When did the sun really set?

**(A)** 5:10 PM **(B)** 5:21 PM **(C)** 5:41 PM **(D)** 5:57 PM **(E)** 6:03 PM

3. **Answer (B):** From 6:57 AM to 12:00 PM (noon) is 5 hours and 3 minutes. Since the length of daylight is 10 hours and 24 minutes, there must be another 5 hours and 21 minutes until sunset. The correct sunset time is 5:21 PM.

**1986 Q5**

5. A contest began at noon one day and ended 1000 minutes later. At what time did the contest end?

A) 10:00 p.m. B) midnight C) 2:30 a.m.
D) 4:40 a.m. E) 6:40 a.m.

5. (D) Since 1000 minutes = $\frac{1000}{60}$ hours = $16\frac{2}{3}$ hours = 16 hours, 40 minutes, the contest ended 16 hours 40 minutes past noon or at 4:40 a.m.

**2011 Q5**

5. What time was it 2011 minutes after the beginning of January 1, 2011?


**(A)** January 1 at 9:31PM

**(B)** January 1 at 11:51PM

**(C)** January 2 at 3:11AM

**(D)** January 2 at 9:31AM

**(E)** January 2 at 6:01PM

5. **Answer (D):** Convert 2011 minutes to 33 hours and 31 minutes. January 1 uses 24 hours. January 2 gets the remainder of the 9 hours and 31 minutes. The time at the end of 2011 minutes was 9:31AM on January 2.