

Meet 3 Answers

1. Probability

December 1991

1. $\frac{1}{6}$
2. 7
3. 2

December 1992

- 1.
- 2.
- 3.

December 1993

- 1.
- 2.
- 3.

December 1994

1. $\frac{4}{7}$ or $\frac{3}{4}$
2. $\frac{65}{256}$
3. 24 yellow, 18 silver, 30 blue

December 1995

1. 21.4
2. .955
3. $\frac{5}{33}$

December 1996

1. $\frac{2}{5}$
2. 13.35
3. $\frac{121}{301}$

December 1999

1. .096
2. .024
3. $\frac{1}{6}$

December 2000

1. $\frac{3}{5}$
2. $\frac{3}{7}$
3. $\frac{53}{180}$

December 2001

1. $\frac{1}{12}$
2. $\frac{1}{3}$
3. 31250

December 2002

1. $\frac{1}{52}$
2. $\frac{11}{16}$
3. $\frac{1}{280}$

December 2003

1. $\frac{7}{17}$
2. $\frac{37}{64}$
3. $\frac{328}{625}$

December 2004

1. $\frac{11}{15}$
2. $\frac{22}{425}$
3. $\frac{196}{495}$

1. Probability

December 2005

1. $\frac{1}{28}$
2. $\frac{1}{5}$
3. 6

December 2006

1. $\frac{9}{66}$
2. $\frac{5}{12}$
3. $\frac{322}{429}$

December 2007

1. $\frac{8}{15}$
2. $\frac{13}{16}$
3. \sqrt{n}

December 2008

1. $\frac{1}{2}$
2. $\frac{5}{21}$
3. $\frac{1}{4}$

December 2009

1. $\frac{1}{9}$
2. $\frac{5}{324}$
3. $\frac{21}{32}$

December 2010

1. $\frac{13}{49}$
2. $\frac{2}{7}$
3. $\frac{25}{52}$ or **.4808**

December 2011

- 1.
- 2.
- 3.

December 2012

- 1.
- 2.
- 3.

2. Exponents and Radicals

December 1988

1. 10
2. $4^{14} 8^{10} 9^{10} 3^{22}$
3. $x = 4$ $y = 50$

December 1989

1. $16 - 8\sqrt{3}$
2. $\frac{5}{2}$
3. $t = -1$ or 0

December 1991

1. $\frac{3}{5}$
2. 4
3. 9

December 1992

1. 90
2. $\frac{227}{60}$
3. 1 or 2

December 1993

1. $2\frac{1}{2}$
2. $\frac{2}{27}$
3. -1 or 2

December 1994

1. $\frac{1}{4}$
2. 26 or 10
3. 9

December 1995

1. $\frac{185\sqrt{2}}{4}$ or $46.25\sqrt{2}$
2. $x < -1$ or $x > 2$
3. 27

December 1996

1. $3b + 7c$
2. -64
3. $\frac{5}{72}$

December 1999

1. $\frac{1}{2}$
2. 150
3. ADECB

December 2000

1. 5
2. 3, -2
3. $\frac{1+\sqrt{5}}{2}$ or $\frac{1}{2} + \frac{\sqrt{5}}{2}$

December 2001

1. 7
2. no solution
3. $x = 1, 2, 3, 4, 5$

December 2002

1. 9
2. 33
3. 81

December 2003

1. 24
2. $\frac{5}{16}$
3. 5

December 2004

1. 4 or $k = 4$
2. $\sqrt[6]{24}$
3. 9 or $x = 9$

December 2005

1. $-\sqrt{3}$
2. 5
3. -2, -1, 0, 2

2. Exponents and Radicals

December 2006

1. -1 or 4
2. 2
3. 6

December 2007

1. $\frac{5}{4}$ or $1\frac{1}{4}$ or 1.25
2. $\sqrt{3} - \sqrt{2}$
3. $-\frac{1}{8}$

December 2008

1. 65
2. 2400
3. 1 or -2

December 2009

1. 6
2. $\frac{5}{12}$
3. $-3 - 2\sqrt[4]{2} - 2\sqrt{2} - 2\sqrt[4]{8}$

December 2010

1. $6\sqrt[3]{17}$
2. -3, 8 or $x = -3, x = 8$
3. $-25\sqrt{5}$

December 2011

- 1.
- 2.
- 3.

December 2012

- 1.
- 2.
- 3.

3. Lines, Angles, and Polygons

December 1988

1. 3 : 7
2. 110
3. 81°

February 1989

1. 17
2. 360
3. $64 + 64\sqrt{2}$

December 1989

1. 39
2. $80^\circ 120^\circ 150^\circ$
3. 360°

January 1990

1. 3π
2. 8
3. $P_1 = 3$ $P_2 = 6$

December 1991

1. 72.5
- 2.
- 3.

February 1992

1. 36.7°
2. $-32 + 32\sqrt{2}$
- 3.

February 1993

- 1.
- 2.
- 3.

December 1992

1. 68°
- 2.
- 3.

December 1993

- 1.
- 2.
- 3.

December 1994

1. 36°
2. 150°
3. $3\frac{3}{4}$ or $\frac{15}{4}$

December 1995

1. 58
2. 14
3. 360

December 1996

1. 15
2. p^2
3. 90

December 1999

1. 60
2. 135
3. $\frac{2\sqrt{3}}{3}$

December 2000

1. 216
2. 23
3. 24

December 2001

1. 20
2. 10
3. $20\sqrt{3}$

December 2002

1. 135
2. 60°
3. 6

December 2003

1. 72
2. $4\sqrt{3}$
3. 2880

3. Lines, Angles, and Polygons

December 2004

1. 150°
2. 324
3. $36 + 18\sqrt{3}$

December 2005

1. 171 or 171 cm
2. 156 or 156°
3. $\frac{60}{13}$ or $\frac{60}{13}$ ft. or $4\frac{8}{13}$

December 2006

1. 9
2. $6\sqrt{2} + 2\sqrt{58}$
3. $18\sqrt{6} + 36\sqrt{2}$

December 2007

1. 18
2. 360°
3. 110°

December 2008

1. 30
2. $27 + 27\sqrt{3}$
3. $5\sqrt{3}$

December 2009

1. 36
2. $180n + 360$
3. 122

December 2010

1. $90 - a$
2. 2880
3. $4\sqrt{6}$

December 2011

- 1.
- 2.
- 3.

December 2012

- 1.
- 2.
- 3.

4. Complex Numbers

December 1988

- $\frac{6}{5} - \frac{9}{10}i$
- 0, 1, -1**
- $f(x) = x^5 - 3x^4 + 29x^3 - 77x^2 + 100x - 50$

December 1989

- $\frac{3}{25} + \frac{4}{25}i$
- $x = -1, 2, \text{ or } \frac{2}{3} \pm \frac{1}{3}i$
- $-\frac{1}{2} - \frac{1}{2}i$

December 1991

- 0**
- $-\frac{4}{13} + \frac{7}{13}i$
- 0, $\pm 2\sqrt{3}$**

December 1992

- $\frac{4}{25} - \frac{3}{25}i$
- $2i, i$**
- $\frac{59}{64} - \frac{70\sqrt{3}}{16}$

December 1994

- 5**
- $0 - 1889568i$
- $\pm(2 + 3i)$

March 1994

- $-\frac{15}{34} + \frac{21}{17}i$
- 3 and $2i$**
- $\pm i, \pm \frac{\sqrt{3}}{2}, \pm \frac{1}{2}i$

December 1995

- $\frac{10}{17} - \frac{11}{17}i$
- $\frac{3}{5} + \frac{1}{5}i$
- $1 - 2i, 2\frac{1}{7}$

December 1996

- 61 - 7i**
- $-64 - 64\sqrt{3}i$ or $128 \text{ cis} 240^\circ$
- $3 + 2i$ or $-3 - 2i$

December 1998

- $-2 + \frac{2}{3}i$
- $\frac{5}{13} - \frac{1}{13}i$
- $1 + \sqrt{3}i$

December 1999

- $1 + i$
- 4**
- 1**

December 2000

- $\frac{5}{13} - \frac{12}{13}i$
- (4, 3)**
- $(1 - 5i, -1 - \sqrt{5}i), (1 + \sqrt{5}i, -1 + \sqrt{5}i)$

December 2001

- 50**
- 8**
- $1 - i, i\sqrt{5}, -i\sqrt{5}, 1 + i$

December 2002

- $\frac{12}{13} + \frac{5}{13}i$
- 324**
- $2 - i, 3 \pm 2i$

4. Complex Numbers

December 2003

1. 120
2. $\sqrt{7}i$
3. 4

December 2004

1. 0
2. $1+2i$
3. $5+7i, -6-7i$

December 2005

1. $-\frac{17}{25} - \frac{6}{25}i$
2. $x^3 - 2x^2 + 9x - 18 = 0$
3. $\frac{-1 \pm i\sqrt{5}}{2}$

December 2006

1. $\frac{3}{13} - \frac{11}{13}i$
2. $\sqrt{65}$
3. $512i$

December 2007

1. $-2-6i$
2. 1
3. $x^4 + 4 = 0$

December 2008

1. $20-20i$
2. 1
3. $3-2i, \frac{2}{3}, -\frac{3}{2}$

December 2009

1. $1+6i$
2. $-\frac{9}{10} + \frac{13}{10}i$
3. $1+i$ and $-1-i$

December 2010

1. $10-11i$
2. $-1 \pm i\sqrt{5}$
3. 4

December 2011

- 1.
- 2.
- 3.

December 2012

- 1.
- 2.
- 3.

5. Arithmetic with Percent

December 1994

1. \$9.60
2. 137 boxes
3. 30%

December 1995

1. 89
2. 16
3. 2000

December 1996

1. $\frac{9407}{9900}$
2. \$2800
3. 499

December 1998

1. 25
2. 6.391
3. (24, 144) (48, 72)

December 1999

1. 113.5
2. 25
3. 16

December 2000

1. 38.8 or 38%
2. \$2870 or 2870
3. 24 grams or 24

December 2001

1. 125
2. 37.14
3. 6050

December 2002

1. 400%
2. 10%
3. 12.5%

December 2003

1. 50
2. 48°
3. 7251.03

December 2004

1. 400
2. 4725
3. 35

December 2005

1. 75 or 75 girls
2. 40 or 40 ft
3. 25 or 25 students

December 2006

1. 240
2. May 18
3. \$6,000

December 2007

1. 60%
2. 200%
3. $\frac{1}{2}$ acre or .5 acres

December 2008

1. 16,105
2. \$900
3. 8

December 2009

1. 10
2. 4
3. 5.11

December 2010

1. 72
2. 32
3. 64

December 2011

- 1.
- 2.
- 3.

December 2012

- 1.
- 2.
- 3.