

Meet 1 Answers

1. Arithmetic with “*” Operations

December 1991

- 1.
2. 8 or -4
- 3.

December 1992

- 1.
- 2.
- 3.

October 1993

1. $9/16$ or $.5625$
2. (3, 4) and (-3, 4)
3. 9 and 15

October 1994

1. $522/85$
2. 48
3. 38 and 39

October 1995

1. $3/5$
2. 3 notebooks, 25 pens
3. 1994 by 128 people

October 1996

1. 7
2. 127 or -273
3. 60%

October 1997

1. 104_5
2. August 11
3. $22/2 + 2$ (Check student ans. = 13)

October 1998

1. 24
2. 2500
3. $4609/512$

October 1999

1. 97
2. 16,000 or \$16,000
3. 126

October 2000

1. 17
2. 30
3. 10.8

October 2001

1. 8
2. $12/7$ or $1\ 5/7$
3. 1

October 2002

1. 0
2. 20,112 or 20,1127 or 20112
3. $1/2$

October 2003

1. 42
2. 5
3. 200 or \$200

October 2004

1. -7
2. 440
3. 1

October 2005

1. 11.01 or \$11.01
2. 0
3. $a = 16$, $b = \text{any number}$

October 2006

1. 26
2. $a = \pm b$
3. 25

October 2007

1. 2
2. $-4/3$
3. \$45

September 2008

1. 37
2. 42,857
3. 42

1. Arithmetic with “*” Operations

October 2009

1. $\frac{6}{13}$
2. $\frac{1}{2}n$
3. 19 or -5

October 2010

1. 4
2. 1
3. 1,966,157

October 2011

1. 0
2. 735 or 735 bales
3. 1-c or c

October 2012

1. -10
2. 14th
3. 4

2. Inequalities and Absolute Values

October 1988

1. $-2 < x < 1$
2. 67
3. $x < -2$ or $0 < x < 2$ or $x > 4$

October 1989

1. $10/7$ or $-2/3$
2. $\{-4, -3, 1, 2\}$
3. $N = 0.0401$

October 1991

- 1.
- 2.
- 3.

October 1992

- 1.
- 2.
- 3.

October 1993

1. 2 or $x = 2$
2. $x < 3$, but $x \neq 1$ or 0
3. $-1 < x < 2$ or $3 < x < 6$

October 1994

1. $w = -2, 1, \text{ or } -1$
2. $x < -2$ or $0 < x < 4/3$ or $x > 3$
3. $0 \leq x \leq \frac{7}{6}$ or $x \geq \frac{19}{6}$

October 1995

1. -3
2. 9
3. $x < -3$ or $-1 < x \leq 3 \frac{1}{2}$

October 1996

1. $x < 1$
2. 2, 3, 4
3. $-4 < x < 0$ or $x > 1$

October 1997

1. $x \leq -1 \frac{3}{4}$
2. $-3 + \sqrt{14} \leq x \leq 1$ or $x \geq 5$
3. $a = 3, b = -12, c = 15$

October 1998

1. $x > 2$
2. 7
3. $\{-2, 0, 2, 4\}$

October 1999

1. $16 < y^2 + 4x < 69$
2. $x \leq -2$ or $x \geq 2$
3. $-2 < x < 0$ or $x \geq \frac{5}{3}$

October 2000

1. -10
2. $4 < x \leq 12$
3. $\{-1, 0, 1, 2, 3\}$

October 2001

1. $x \geq 2$
2. $0 < x < 5$
3. ± 2 or 2, -2

October 2002

1. $x < 3$
2. $x = 3$
3. 4

October 2003

1. 10
2. $x \leq 1/5$ or $x \geq 3$
3. $1 < x < 2$ or $x > 4$

October 2004

1. $0 \leq y \leq 18$
2. $m < 0$ or $m > 2$
3. $x \geq 1/2$

October 2005

1. -3 or $-1/5$
2. $x < -1$ or $0 < x < 2$
3. $x < 0$ or $0 < x < 2$ or $x < 2$, but $x \neq 0$

October 2006

1. 2
2. 2
3. $|x - 2| + |y| \leq 1$

2. Inequalities and Absolute Values

October 2007

- 1
- $x \geq -3/8$
- $4 < x < 5\frac{1}{3}$

September 2008

- $x > 7$ or $x < -1$
- $1 < x < 3$ or $-\frac{7}{3} < x < -\frac{1}{3}$
- $x > 3.5$ or $x < -1.5$

October 2009

- 1, 2
- {1, 2}
- $0 < x < 2$ or $x > 2$ or $x > 0$ but $x \neq 2$

October 2010

- $(-1, 0)$ or $x = -1, y = 0$
- $x \leq -1$ or $x \geq 13/9$ or $x \leq -1$ or $x \geq 1\frac{4}{9}$
- 7

October 2011

- $x \geq -4$
- $x \leq -2\frac{2}{5}$ or $-\frac{2}{3} < x < 1\frac{1}{2}$ or
 $x \leq -1\frac{2}{5}$ or $-2/3 < x < 3/2$
- $x > 3$

October 2012

- $1 < x < 5$
- $m > 6$
- $x < -2$ or $2 < x < 2\frac{1}{2}$ or $x > 2\frac{1}{2}$

3. Matrices, Determinants, and Systems of Equations

October 1988

- $\begin{bmatrix} 13 & 26 & 4 \\ 15 & 30 & -4 \\ 23 & 46 & 13 \\ 27 & 54 & 18 \end{bmatrix}$
- $x = -2$ or $x = 1$
- $n = 2$

October 1989

- $x = -\frac{3}{2}$ or 1
- $\begin{bmatrix} 10 & -1 & 12 \\ -1 & 5 & -4 \\ 12 & -4 & 16 \end{bmatrix}$
- 555

October 1991

-
-
-

October 1992

-
-
-

October 1993

- $\begin{bmatrix} 4/3 & 2/3 \\ 0 & 1/3 \\ 1 & 1/3 \end{bmatrix}$
- 20 or $-3 \frac{1}{3}$
- 2

December 1993

- 91
- 40 mph, 3900mi
- $\{-2, 1, 3\}$

October 1994

- $\begin{bmatrix} -6 & 0 \\ -12 & 6 \end{bmatrix}$
- $\left(\frac{1}{2}, -\frac{1}{5}\right)$
- 5

October 1995

- $\begin{bmatrix} 32 & 1 \\ 22 & -12 \end{bmatrix}$
- 59¢/lb
- 3

October 1996

- 16
- 22
- $\begin{bmatrix} 6 & -4 & 2/3 \\ 13 & -10 & 1/3 \end{bmatrix}$

October 1997

- $\begin{bmatrix} 1 & 5 \\ 2 & 6 \end{bmatrix}$
- $\begin{bmatrix} 1 & 2 \\ 2 & -1 \\ 11 & 10 & 13 \\ 2 & 1 & 1 \\ 2 & 4 & 6 \end{bmatrix}$
- 2

October 1998

- 5
- 8
- 1 or -1

October 1999

- 2
- 860
- 3

3. Matrices, Determinants, and Systems of Equations

October 2000

1. $-\frac{4}{35}$
2. 3
3. 80 or 80 steps

October 2001

- 1.
- 2.
- 3.

October 2002

1. -2
2. 5
3. 1

October 2003

1. 90
2. 12
3. $a = \frac{1}{2}$, $b = \frac{1}{3}$

October 2004

1. (2, -4)
2. (4, -1)
3. 576

October 2005

1. 3 or -2
2. 5
3. 1

October 2006

1. 0
2. 70 in.
3. 6

October 2007

1. -40
2. $\begin{bmatrix} 28 & 10 \\ 38 & -23 \end{bmatrix}$
3. (3, -4, 2)

September 2008

1. 42
2. (3, 6), (-2, -2), (3, -2), (-2, 6)
3. 32

October 2009

1. $\begin{bmatrix} -6 & -8 & -1 \\ 20 & 20 & -1 \end{bmatrix}$
2. 22
3. 16

October 2010

1. $\begin{bmatrix} 2 & 2 \\ 2 & -4 \end{bmatrix}$
2. 80
3. 5 or -3 or $k = 5$ or -3

October 2011

1. (5, -6)
2. $\begin{bmatrix} 31 & 1 & 14 \\ -18 & 15 & 72 \end{bmatrix}$
3. 2 or $x = 2$

October 2012

1. (2, -7)
2. 12
3. $\begin{bmatrix} 3 \\ 2 \end{bmatrix}$

4. Number Theory

October 1988

1. $d = 9$
2. 722
3. 27720

October 1989

1. 8
2. {13, 31, 17, 71}
3. 344

October 1991

- 1.
- 2.
- 3.

October 1992

- 1.
- 2.
- 3.

October 1993

1. 8 or 7
2. 7
3. 700

October 1994

1. 899
2. 555
3. 53

October 1995

1. 702
2. 15
3. 26

October 1996

1. 35
2. 31
3. 169

October 1997

1. 68
2. 257
3. 125

October 1998

1. 2
2. 20_{17}
3. 4

October 1999

1. 12
2. 23
3. 6

October 2000

1. 4
2. 14
3. 36

October 2001

- 1.
- 2.
- 3.

October 2002

1. 24
2. 21,840
3. 240

October 2003

1. 336
2. 419 454 489
3. 132

October 2004

1. 27
2. 11
3. 1, 3, 9, 27

October 2005

1. 269
2. 96
3. 5

October 2006

1. 20
2. 381654729
3. 41

4. Number Theory

October 2007

1. 304
2. $44,230_8$
3. 503 and 965

September 2008

1. 3^{75}
2. 532
3. 3

October 2009

1. 10,584
2. 150
3. (19, 109), (31, 97), (61, 67)

October 2010

1. 24
2. 20
3. 60

October 2011

1. 25
2. 546
3. 4

October 2012

1. 2160_7 or 2160 base seven
2. 2015
3. 33

5. Geometric Similarities

October 1991

- 1.
- 2.
- 3.

October 1993

- 1.
- 2.
- 3.

October 1994

1. $8\frac{8}{9}$
2. 216
3. $\frac{5\sqrt{13}}{3}$

October 1995

1. 672
2. $26\frac{2}{3}$
3. 7

October 1996

1. $8\frac{4}{7}$
2. 441
3. $18+10\sqrt{3}$

October 1997

1. 48
2. 15
3. 42

October 1998

1. 6
2. 40
3. $\frac{3\sqrt{2}}{2}$

October 1999

1. 40
2. 72
3. 108

October 2000

1. 24
2. 4 : 1
3. 27

October 2001

- 1.
- 2.
- 3.

October 2002

1. 45
2. $\frac{400}{x}$
- 3.

October 2003

1. 4'8"
2. 211
3. 44.33

October 2004

1. 140 or 140°
2. 4 to 9 or 4:9 or $\frac{4}{9}$
3. 6 or 6 ft

October 2005

1. (7, 11)
2. 4.5
3. 4.160

October 2006

1. 33
2. $70\frac{2}{17}$
3. $\frac{128\sqrt{3}}{2}$

October 2007

1. 26
2. 13
3. 324

5. Geometric Similarities

September 2008

1. 171 or 171 cm
2. \$16.20
3. $x = 21, y = 15$

October 2009

1. 29
2. $\frac{9}{2}\pi$
3. 39.76

October 2010

1. $\frac{30}{7}$ or $4\frac{2}{7}$ or $\overline{4.285714}$
2. 29
3. 170

October 2011

1. 4 ft. 4 in.
2. $74\frac{2}{3}$
3. 2.52

October 2012

1. $x = 1, y = \frac{3}{2}$
2. 58.83
3. 5.25