

Oahu Mathematics League

Meet I

September 20, 2014

Answers for Meet I

Event 1: ALGEBRA II — Quadratic and Fractional Equations in One Variable over the Reals with Real Solutions and Work Problems

- A. Roosevelt $-\frac{3}{7}$
B. Punahou no solution
C. McKinley 36

Event 2: GEOMETRY — Angles in a Plane

- A. Punahou 12
B. Maryknoll 117°
C. Punahou 58°

Event 3: ALGEBRA I — Numbers

- A. Maryknoll L
B. Punahou $\frac{5}{4}$
C. Maryknoll 7

Event 4: TRIGONOMETRY — Identities

- A. McKinley $\sin \theta$
B. Punahou $\pm \frac{\sqrt{6}}{6}$
C. Roosevelt $\frac{a}{b}$

Event 5: ALGEBRA I — Sets

- A. Punahou 16
B. Punahou 42
C. Maryknoll 20

Event 6: ALGEBRA II — Simplifying Fractional Expressions

- A. Punahou $3x - 3y$ or $3(x - y)$
B. McKinley x^{4n+2}
C. McKinley $(m - n)^2$

Team Question

- Roosevelt X and Y

Oahu Mathematics League

Meet I

September 21, 2013

Answers for Meet I

Event 1: ALGEBRA II — Quadratic and Fractional Equations with Real Solutions and Work Problems

- A. Pearl City 1
- B. Pearl City $-6, 0, 4, 6$
- C. Moanalua 150

Event 2: GEOMETRY — Angles in a Plane

- A. Moanalua 132
- B. Kamehameha 30
- C. Moanalua 133

Event 3: ALGEBRA I — Numbers

- A. Kamehameha XXIII
- B. Iolani $\frac{61}{495}$
- C. Iolani 111010101

Event 4: TRIGONOMETRY — Identities

- A. Moanalua $-\frac{120}{119}$
- B. Pearl City $-\sin\theta + \sin^3\theta$
- C. Kamehameha 2

Event 5: ALGEBRA I — Sets

- A. Kamehameha 40
- B. Moanalua 22
- C. Moanalua 72

Event 6: ALGEBRA II — Simplifying Fractional Expressions

- A. Moanalua $\frac{-8x+1}{x-1}$
- B. Kamehameha $\frac{1}{3(x-2)}$
- C. Kamehameha $\frac{x}{2(x^2+1)}$

Team Question

- Kamehameha 66

Oahu Mathematics League

Meet I

September 15, 2012

Answers for Meet I

Event 1: ALGEBRA II — Quadratic and Fractional Equations with Real Solutions and Work Problems

- A. Maryknoll $\frac{11}{7}$
- B. Moanalua $x^2 + 13x + 40 = 0$
- C. Maryknoll 6

Event 2: GEOMETRY — Angles in a Plane

- A. Island Pacific 55
- B. Moanalua 106
- C. Mililani 60

Event 3: ALGEBRA I — Evaluation

- A. Island Pacific $\frac{5}{27}$
- B. Moanalua $\frac{171}{23}$ or $7\frac{10}{23}$
- C. Island Pacific $\frac{47}{21}$ or $2\frac{5}{21}$

Event 4: TRIGONOMETRY — Identities

- A. Mililani 2
- B. Maryknoll 24
- C. Island Pacific 31

Event 5: ALGEBRA I — Sets

- A. Mililani $\{-5, -4, -3, -2, -1, 0, 5, 6, 7, 8\}$
- B. Moanalua 41 %
- C. Moanalua 1, 2, 3, 6

Event 6: ALGEBRA II — Simplifying Fractional Expressions

- A. Mililani $\frac{1}{r+s}$
- B. Moanalua $\frac{-3x^2 + 18x - 8}{(x+3)(x-3)}$
- C. Mililani $\frac{1}{y^2}$

Team Question

- Island Pacific 44

Oahu Mathematics League

Meet I

September 17, 2011

Answers for Meet IEvent 1: ALGEBRA II — Quadratic and Fractional Equations with Real Solutions and Work Problems

- A. Damien 4, -6
 B. Damien -14
 C. Damien $3\frac{1}{3}$ hours

Event 2: GEOMETRY — Angles in the Plane

- A. Waipahu 36°
 B. Damien 108°
 C. Waipahu 141°

Event 3: ALGEBRA I — Evaluation

- A. Waipahu $36 \div (6 \times 2 + 12 \div 2) \times 3 = 6$
 B. Damien $\frac{216}{125}$
 C. Waipahu 45

Event 4: TRIGONOMETRY — Identities

- A. Waipahu $-\cot A$
 B. Damien $\tan x$
 C. Waipahu $\frac{-\sqrt{3}}{3}$

Event 5: ALGEBRA I — Sets

- A. Waipahu 82
 B. Waipahu 3
 C. Waipahu 1

Event 6: ALGEBRA II — Simplifying Fractional Expressions

- A. Waipahu $\frac{x^8 + y^{10} - x^5 y^3}{x^5 y^3}$ or $\frac{x^3}{y^3} + \frac{y^7}{x^5} - 1$ or $\frac{x^8 + y^{10}}{x^5 y^3} - 1$
 B. Damien $\frac{x}{x-1}$
 C. Waipahu $\frac{256}{x^{256} - 1}$

Team Question

- Waipahu 416 cm^2

Oahu Mathematics League

Meet I

September 18, 2010

Answers for Meet IEvent 1: ALGEBRA II — Quadratic and Fractional Equations with Real Solutions and Work Problems

- A. Hanalani $\frac{2}{3}, \frac{3}{2}$
- B. Iolani 9
- C. McKinley 4 hours 40 minutes

Event 2: GEOMETRY — Angles in a Plane

- A. Hanalani 20°
- B. Hanalani 20°
- C. McKinley 100°

Event 3: ALGEBRA I — Patterns

- A. McKinley P
- B. McKinley 50
- C. Hanalani 267

Event 4: TRIGONOMETRY — Identities

- A. McKinley $-4\sqrt{5}$
- B. Iolani $-\frac{\sqrt{2}}{2}$
- C. Hanalani $\frac{4}{5}$

Event 5: ALGEBRA I — Sets

- A. Iolani $\{0, 4, 6, 8\}$
- B. Hanalani 11
- C. Iolani 32

Event 6: ALGEBRA II — Simplifying Fractional Expressions

- A. Hanalani $\frac{2}{a}$
- B. Iolani $\frac{2}{x-3}$
- C. McKinley $\frac{1}{x(x^2+x+1)}$

Team Question

- Hanalani 270

Oahu Mathematics League

Meet I

September 26, 2009

Answers for Meet I

Event 1: ALGEBRA II - Quadratic and Fractional Equations with Real Solutions and Work Problems

- A. Mid-Pacific -5, 2
- B. Mid-Pacific -20, 20
- C. Hawaii Baptist $\frac{60}{13}$

Event 2: GEOMETRY - Angles in a Plane

- A. Hawaii Baptist 28
- B. Hawaii Baptist 140
- C. Campbell 72°

Event 3: ALGEBRA I - Patterns

- A. Mid-Pacific 225
- B. Campbell 186
- C. Hawaii Baptist 161

Event 4: TRIGONOMETRY - Identities

- A. Campbell $\sqrt{3} - 2$
- B. Hawaii Baptist $1 + \sin\theta \cos\theta$
- C. Mid-Pacific $\sec 4x$

Event 5: ALGEBRA I - Sets

- A. Hawaii Baptist Juniors, Boys, No
- B. Hawaii Baptist 15
- C. Campbell 6

Event 6: ALGEBRA II - Simplifying Fractional Expressions

- A. Mid-Pacific $\frac{(x-2)(x-11)}{2(x-4)}$ or $\frac{x^2 - 13x + 22}{2x - 8}$
- B. Mid-Pacific $\frac{x+2}{x^2+4}$
- C. Campbell $-\frac{4r}{3}$

Team Question

Mid-Pacific 2428839

Oahu Mathematics League
Meet 1
September 27, 2008

Answers for Meet 1

Event 1: ALGEBRA II - Quadratic and Fractional Equations with Real Solutions and Work Problems

- A. Radford $-\frac{1}{3}$
B. Radford $b = -8, c = 3$
C. Radford 12 hours

Event 2: GEOMETRY - Angles in a Plane

- A. Roosevelt 130°
B. Roosevelt 56°
C. Radford 44°

Event 3: ALGEBRA I - Patterns

- A. Radford 81
B. Roosevelt -7
C. Radford 987

Event 4: TRIGONOMETRY - Identities

- A. Kalani $-2 - \sqrt{3}$
B. Radford $\frac{7\sqrt{15}}{15}$
C. Radford $4n^3 - 3n$

Event 5: ALGEBRA I - Sets

- A. Roosevelt $\{2, 4\}$
B. Roosevelt 56 children
C. Kalani $\{11, 12, 14\}$

Event 6: ALGEBRA II - simplifying Fractional Expressions

- A. Roosevelt $\frac{x-2}{x+2}$
B. Roosevelt 1
C. Radford $\frac{x^n+3}{2(x^n+5)(x^n-5)}$ or ~~$\frac{x^n+3}{2(x^n-25)}$~~ $\frac{x^n+3}{2x^{2n}-50}$

Team Question

Radford 6

Answers for Meet 1Event 1: ALGEBRA II – Quadratic and Fractional Equations

- A. Iolani $9x^2 - 12x - 1 = 0$
B. Iolani 1, 5, 8, 16
C. Iolani -2, 4

Event 2: GEOMETRY – Angles in a Plane

- A. Iolani 60°
B. Iolani 100%
C. University Lab 45°

Event 3: ALGEBRA I – Sets

- A. University Lab 2, 4, 6, 8, 10
B. Iolani 180
C. University Lab 316

Event 4: TRIGONOMETRY – Identities

- A. University Lab 4
B. Iolani -2
C. Iolani $8k^4$

Event 5: ALGEBRA I - Patterns

- A. University Lab 31
B. Iolani 29
C. University Lab 90

Event 6: ALGEBRA II – Simplifying Fractional Expressions

- A. Iolani $\frac{x+1}{x-1}$
D. University Lab $\frac{2x+1}{x^2+x-2}$ or $\frac{2x+1}{(x-1)(x+2)}$
E. Iolani 0

Team Question

- Iolani 120°

Oahu Mathematics League

Meet 1

September 30, 2006

Answers for Meet 1

Event 1: Algebra II – Quadratic and Fractional Equations in One Variable over the Real Numbers with Real

Solutions

- A. Hanalani 18
- B. Hanalani -3
- C. Kaimuki $\frac{60}{13}$

Event 2: Geometry – Angles in a Plane

- A. Hanalani 105°
- B. Hanalani 96°
- C. Kaimuki 91°

Event 3: Algebra I – Sets

- A. Hanalani {0, 4, 6, 8}
- B. Pearl City 71
- C. Hanalani 25

Event 4: Trigonometry – Identities

- A. Hanalani $-\frac{1}{3}$
- B. Pearl City $\frac{63}{16}$
- C. Kaimuki $\sin 8C$

Event 5: Algebra I – Patterns

- A. Hanalani $\frac{17}{3}$
- B. Kaimuki 298
- C. Pearl City 1080

Event 6: Algebra II – Simplifying Fractional Expressions

- A. Hanalani $c - 1$
- B. Pearl City $m - 2$
- C. Pearl City $-x^a$

Team Question

Kaimuki

Uncle	Aunt	Game
Ed	Sara	<i>Call of Duty 2</i>
John	Barbara	<i>Madden NFL 2006</i>
Dave	Gloria	<i>Halo 2</i>
Bill	Donna	<i>Gun</i>
Tom	Linda	<i>King Kong</i>

Oahu Mathematics League

Meet 1

October 1, 2005

Answers for Meet 1

Event 1: Algebra II – Quadratic and Fractional Equations in One Variable over the Real Numbers with Real

Solutions

- A. Sacred Hearts 1, 5
- B. Campbell 17
- C. Kailua 12

Event 2: Geometry – Angles in a Plane

- A. Kailua 10°
- B. Campbell 83°
- C. Mililani 50°

Event 3: Algebra I – Sets

- A. Campbell 8
- B. Mililani a, c
- C. Sacred Hearts 28

Event 4: Trigonometry – Identities

- A. Campbell $\sqrt{3}$
- B. Kailua 0
- C. Kailua $\frac{22}{27}$

Event 5: Algebra I – Patterns

- A. Kailua 8 or 9 or 15 or 11
- B. Mililani $nx(2+\sqrt{2})$ or $2nx+nx\sqrt{2}$
- C. Sacred Hearts 168 pips

Event 6: Algebra II – Simplifying Fractional Expressions

- A. Kailua $\frac{2b+a}{2ab}$
- B. Mililani $\frac{4y^2-6y+9}{(4y-1)(2y-3)}$ or $\frac{4y^2-6y+9}{8y^2-14y+3}$
- C. Campbell $\frac{(x-1)^2}{(3x-2)(x-3)}$ or $\frac{x^2-2x+1}{3x^2-11x+6}$

Team Question

- Kailua $\sqrt{65}$

Oahu Mathematics League

Meet 1

September 25, 2004

Answers for Meet 1

Event 1: Algebra II – Quadratic and Fractional Equations in One Variable over the Real Numbers with Real Solutions

- A. Radford $\frac{16}{15}$ or $1\frac{1}{15}$
B. Iolani 1, 5, 8, 16
C. McKinley 9 days

Event 2: Geometry – Angles in a Plane

- A. McKinley 132°
B. Iolani 54°
C. Iolani 42°

Event 3: Algebra I – Sets

- A. Iolani 14
B. Pearl City {2, 4, 8, 10, 14, 16, 20}
C. Radford 3

Event 4: Trigonometry – Identities

- A. McKinley 0
B. Iolani -2
C. Aiea $\frac{25}{144}$

Event 5: Algebra I – Patterns

- A. Pearl City 279
B. McKinley

L
J

C. Radford 231

Event 6: Algebra II – Simplifying Fractional Expressions

- A. Aiea $\frac{-2(x+4)}{x+2}$ or $\frac{-2x-8}{x+2}$
B. Iolani $\frac{1}{x-2}$
C. Aiea $\frac{x}{y^2}$

Team Question

Pearl City 651

Oahu Mathematics League

Meet 1

September 20, 2003

Answers for Meet 1

Event 1: Algebra I – Sets

- A. Punahou 8
- B. St. Andrews 16
- C. Iolani 1, 2, 3, 6, 7

Event 2: Algebra II – Quadratic and Fractional Equations in One Variable over the Real Numbers with Real Solutions

- A. Iolani $-\frac{4}{5}$
- B. St. Andrews 50
- C. St. Andrews $6 \pm \sqrt{23}$

Event 3: Trigonometry – Identities

- A. Punahou $\frac{\sqrt{3}}{2}$
- B. Iolani $\frac{\sqrt{2}}{2}$
- C. St. Andrews $\frac{-\sqrt{3}-1}{2}$ or $\frac{-\sqrt{3}}{2} - \frac{1}{2}$

Event 4: Geometry – Angles in a Plane

- A. St. Andrews 175°
- B. Punahou 150°
- C. Iolani 144°

Event 5: Algebra II – Simplifying Fractional Expressions

- A. Punahou $\frac{a+b}{2c+1}$
- B. St. Andrews $\frac{x^2}{y^2}$
- C. Iolani $\frac{x}{x+1}$

Event 6: Algebra I – Patterns

- A. St. Andrews 13
- B. Iolani -11
- C. Punahou 45

Team Question

- St. Andrews 96

Oahu Mathematics League

Meet 1

September 28, 2002

Answers for Meet 1

Event 1: Algebra I – Sets

- A. Hanalani { 0, 4, 6, 8 }
B. Mililani 8
C. McKinley 153

Event 2: Algebra II – Quadratic and Fractional Equations in One Variable over the Real Numbers with Real Solutions

- A. Hanalani No Solution, \emptyset , { }
B. McKinley $k < \frac{17}{2}$
C. Mililani $\frac{2}{3}$ hours

Event 3: Trigonometry – Identities

- A. Hanalani $\frac{5}{2}$
B. Mililani $\frac{\sqrt{7}}{7}$
C. McKinley $-\frac{117}{125}$

Event 4: Geometry – Angles in a Plane

- A. McKinley 131°
B. Hanalani 30°
C. McKinley 155°

Event 5: Algebra II – Simplifying Fractional Expressions

- A. Hanalani $\frac{x+2}{x-2}$
B. Mililani $\frac{-2x^2+3}{(x+1)(x-1)(x^2+x+1)}$
C. McKinley 0

Event 6: Algebra I – Patterns

- A. Hanalani 26
B. Mililani $(14 + 7\sqrt{2})x$
C. Mililani 108

Team Question

- Mililani 882

Oahu Mathematics League

Meet 1

September 18, 1999

29, 2001

Answers for Meet 1

Event 1: Algebra I - Sets

- A. Kamehameha {0, 1, 4}
- B. Kamehameha 4
- C. Roosevelt 18

Event 2: Algebra II – Quadratic and Fractional Equations with Real Solutions and Work Problems

- A. Roosevelt -1 or $\frac{2}{5}$ (or) $\frac{2}{5}, -1$
- B. Kamehameha $x^2 + 2x - 15 = 0$ (or) $-x^2 - 2x + 15 = 0$
- C. Kamehameha $\frac{30}{19}$ hours (or) $1\frac{11}{19}$ hours

Event 3: Trigonometry - Identities

- A. Waialua $-\frac{1}{2}$
- B. Kamehameha $-\frac{113}{85}$ (or) $-1\frac{28}{85}$
- C. Waialua $\frac{343}{13824}$

Event 4: Geometry - Angles in a Plane

- A. Waialua 40°
- B. Roosevelt $x = 3, y = -20$
- C. Kamehameha 47.5° (or) $47\frac{1}{2}^\circ$

Event 5: Algebra II - Simplifying Fractional Expressions

- A. Waialua $\frac{3x^2 + 3x + 1}{x^2 - 1}$ (or) $\frac{3x^2 + 3x + 1}{(x + 1)(x - 1)}$
- B. Roosevelt $\frac{4}{3}$ (or) $1\frac{1}{3}$
- C. Kamehameha $\frac{x^2 + 25x + 114}{x + 1}$ (or) $\frac{(x + 19)(x + 6)}{x + 1}$

Event 6: Algebra I - ^{PATTERNS} Evaluation

- A. Waialua $\frac{1}{256}$
- B. Roosevelt 113
- C. Roosevelt 2

Team Question

Waialua 30, 34, 37, 40, 42

OAHU MATHEMATICS LEAGUE

Meet 1

September 23, 2000

Answers for Meet 1

Event 1: ALGEBRA I - Sets

- A. Kalani 4
- B. University 15 days
- C. Kalani 33

Event 2: ALGEBRA II - Quadratic/Fractional Equations in One Variable over the Real Numbers with Real Solutions

- A. University -2, 17
- B. University $-2, 1\frac{1}{2}$ or $\frac{3}{2}$
- C. Mid-Pacific \$5

Event 3: TRIGONOMETRY - Identities

- A. University $-\frac{\sqrt{3}}{6}$
- B. University $-\tan^2 \theta$
- C. Punahou $\pm \frac{2\sqrt{5}}{5}$

Event 4: GEOMETRY - Angles in a Plane

- A. Punahou 60°
- B. Mid-Pacific 105°
- C. Kalani 190°

Event 5: ALGEBRA II - Simplifying Fractional Expressions

- A. Punahou $y + 1$
- B. Mid-Pacific $\frac{a-b}{a}$
- C. Punahou $\frac{3}{x+2y+z}$

Event 6: ALGEBRA I - Evaluation

- A. Mid-Pacific $2\frac{1}{4}$ or $\frac{9}{4}$ or 2.25
- B. Punahou $-2\frac{7}{8}$ or $\frac{-23}{8}$ or -2.875
- C. University $11\frac{35}{36}$ or $\frac{431}{36}$

Team Question

- Kalani 30

September 18, 1999

Answers for Meet 1Event 1: Algebra I - Sets

- A. $\{0, 1, 4, 9\}$
- B. 144 students
- C. Group B was larger by 1 member(s)

Event 2: Algebra II - Quadratic/Fractional Equations

- A. ± 2
- B. -2
- C. $\frac{40}{11}$ or $3\frac{7}{11}$ hours

Event 3: Trigonometry - Identities

- A. $\frac{\sqrt{3}}{2}$
- B. $\frac{65}{33}$ or $1\frac{32}{33}$
- C. $a^3\sqrt{b}$

Event 4: Geometry - Angles in a Plane

- A. 124°
- B. 115°
- C. $m\angle JCE = 145^\circ$, $m\angle E = 20^\circ$, $m\angle BJC = 75^\circ$

Event 5: Algebra II - Simplifying Fractional Expressions

- A. $x - 3$
- B. $\frac{-11x+14}{(x-3)(x+3)(2x+1)}$
- C. $(ax + by)^2$ or $a^2x^2 + 2abxy + b^2y^2$

Event 6: Algebra I - Evaluation

- A. $\frac{5}{6}$
- B. 42
- C. 26620

Team Question:

Albacore	= \$12
Barracuda	= \$9
Carp	= \$15
Dogfish	= \$17
Eel	= \$20
Flounder	= \$11
Gar	= \$14

Oahu Mathematics League

Meet 1

September 19, 1998

Answers for Meet 1

Event 1: Algebra I – Sets

- A. 12
- B. $\{0, 6, 7, 8, 9, 10, 11, 12, 13, 14, 16, 18\}$
- C. 237

Event 2: Algebra II – Quadratic/Fractional Equations

- A. $\frac{1}{4}, \frac{2}{3}$
- B. $-2, \frac{1}{2}$
- C. $\frac{2\sqrt{69}}{15}$

Event 3: Trigonometry – Identities

- A. $\frac{1}{4}$
- B. $-\frac{1}{3}$
- C. $2 - \sqrt{3}$

Event 4: Geometry – Angles in a Plane

- A. 20°
- B. 71°
- C. $m = 121.5^\circ, h = 72^\circ$

Event 5: Algebra II – Simplifying Fractional Expressions

- A. $\frac{x-1}{4}$
- B. $\frac{x(x^m - x^n)}{x^m + x^n}$ or $\frac{x^{m+1} - x^{n+1}}{x^m + x^n}$
- C. $\frac{x-2}{x-3}$

Event 6: Algebra I – Evaluation

- A. -4
- B. 8
- C. -0.5 or $-\frac{1}{2}$

Team Question:

108,300

Oahu Mathematics League
Meet I
September 27, 1997

Answers for Meet I

Event 1: Algebra I - Sets

- A. c
- B. {p, q, r, s, t, v}
- C. 137

Event 2: Algebra II - Quadratic/fractional equations in one variable over the reals with real solutions and Work Problems

- A. 6, 7
- B. 42 minutes
- C. $\frac{1}{9}$

Event 3: Trigonometry - Identities

- A. $\sqrt{3}$
- B. 2
- C. $\frac{-3\sqrt{10}}{10}$

Event 4: Geometry - Angles in a Plane

- A. 148°
- B. 29°
- C. 46°

Event 5: Algebra II - Simplifying Fractional Expressions

- A. x^{2n}
- B. $\frac{-4x^2}{x+2}$
- C. $\frac{3x^3y + x^2y^2}{x^3 + x^2y - xy^2 - y^3}$ -or- $\frac{x^2y(3x + y)}{(x + y)^2(x - y)}$

Event 6: Algebra I - Evaluation

- A. $\frac{-51}{4}$ or -12.75
- B. $\frac{1}{2304}$
- C. $\frac{247}{36}$ or $6\frac{31}{36}$

Team: 1309 yards

Oahu Mathematics League
Meet I
September 28, 1996

ANSWERS

Event 1: ALGEBRA I - Sets

A. $\{ 1, 9, 15 \}$

B. 36

C. largest: 15 smallest: 0

Event 2: ALGEBRA II - Quadratic and fractional equations in one variable over the reals with real solutions

A. 2, 6

B. $4x^2 + 5x - 6 = 0$ or $-4x^2 - 5x + 6 = 0$

C. Ms. Liz: 8 hours

Mr. Twister: $13\frac{1}{3}$ hours

Event 3: TRIGONOMETRY - Identities

A. $\sin x$

B. $\frac{10 - 3\sqrt{10}}{20}$ or $\frac{1}{2} - \frac{3\sqrt{10}}{20}$

C. $\frac{32}{225}$

Event 4: GEOMETRY - Angles in a plane

A. 54°

B. $\frac{900}{11}^\circ$ or $81\frac{9}{11}^\circ$

C. 80°

Event 5: ALGEBRA II - Simplifying fractional expressions

A. $-xy$

B. $\frac{a^{2x}(a^x - b^x)}{a^x + b^x}$

C. $\frac{a^3 - 3a^2b - b^3}{a^2 + ab + b^2}$

Event 6: ALGEBRA I - Evaluation

A. $\frac{189}{16}$ or $11\frac{13}{16}$ or 11.8125

B. 22

C. -7

Event 7: TEAM

$\frac{1}{256}$ or 0.00390625

Answers for Meet 1

Event 1

- A. 17
 B. 2
 C. 3

Event 2

- A. 24 hr.
 B. $-2, \frac{3}{2}$
 C. $-4 \pm \sqrt{22}$

Event 3

- A. $\frac{\sqrt{21}}{5}$
 B. $-\frac{\sqrt{3}}{2}$
 C. $\frac{3 + k - 2\sqrt{2 + 2k}}{1 - k}$

Event 4

- A. $180 + a - b$
 B. 90°
 C. 65°

Event 5

- A. $\frac{a + b}{a - b}$
 B. $\frac{x^2 (x + 1)}{(2x - 1)(x - 1)(x + 2)^2}$
 C. $\frac{1}{c^2}$

Event 6

- A. $\frac{169}{84}$ or $2\frac{1}{84}$
 B. $\frac{8}{15}$
 C. $\frac{849}{260}$ or $3\frac{69}{260}$

Team 3528

Answers for Meet 1

Event 1

- A. 8
 B. {7, 9}
 C. 165

Event 2

- A. $2x^2 - 10x + 11 = 0$
 B. $\frac{41}{4}$ or $10\frac{1}{4}$ or 10.25
 C. 180 mph, 120 mph

Event 3

- A. $\cos x$
 B. 5
 C. $\frac{18 - 10\sqrt{5}}{11}$

Event 4

- A. 90°
 B. 35°
 C. 98°

Event 5

- A. x
 B. $\frac{x^m}{x^2 + xy + y^2}$
 C. $\frac{p + 2n}{3p - n}$

Event 6

- A. 24
 B. $-\frac{135}{4}$ or $-33\frac{3}{4}$ or -33.75
 C. -86

Team 36