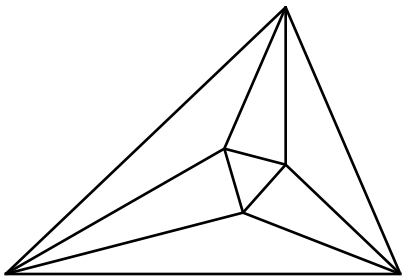
Meet 1 - Event A 2003-2004



Questions are worth 2-2-2-4-4 points respectively.
Remember your units.

_____1. For x=8,989,898,989,899,795, which of the following is largest?

$$\frac{17}{x}, \frac{17}{x-1}, \frac{x-1}{17}, \frac{x}{17}, \frac{x+1}{17}$$

_____2. If a number is divisible by 8, then it must also be divisible by what other numbers, other than 1?

_____3. How many cups are in 3 quarts and 1 pint?

_____4. Ashley held the meter sticks upside down when she measured Jordan's height, so she reported a height of 1 meter 75 centimeters, which was far too tall. What was Jordan's height in centimeters?

_____5. Find the sum $a+b+c$.

$$\frac{18}{7} = a - \frac{1}{b - \frac{2}{c}}$$

Name_____School_____

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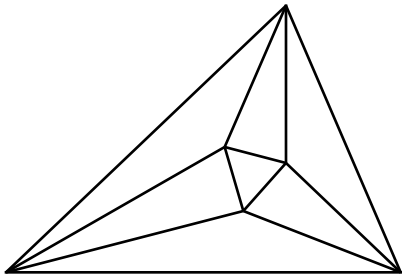
Answers



Questions are worth 2-2-2-4-4 points respectively.
Remember your units.

$\frac{x+1}{17}$ 1. Large number = $\frac{\text{large}}{\text{small}}$, so $\frac{x+1}{17}$
(The last 3 choices = 5.288175876E14 in the calculator.)

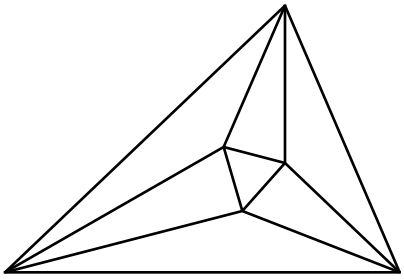
2, 4 2. $8 = 2 \times 4$ (must have both answers)

14 3. 3 quarts x 4 cups/quart = 12 cups
1 pint x 2 cups/pint = 2 cups
12 cups + 2 cups = 14 cups

125cm 4. 100 - 75 = 25 cm, 100 + 25 = 125 cm

9 5. $\frac{18}{7} = 3 - \frac{1}{\frac{7}{3}} = 3 - \frac{1}{3 - \frac{2}{3}}$ $3 + 3 + 3 = 9$

Meet 1 - Event B 2003-2004



Questions are worth 2-2-2-4-4 points respectively.
Remember your units.

_____1. Simplify to a fraction in lowest terms:

$$\frac{^{-}4-^{-}9}{10-13}$$

_____2. Maureen's package of beef weighed 1 pound 2 ounces and Riley's package of beef weighed 14 ounces. How much more beef did Maureen have?

_____3. Jason studied from 11:45 AM until 2:20 PM. How long did he study in hours and minutes?

_____4. Vee could organize his pennies into 14 rows of equal length, or 15 rows of equal length, or 20 rows of equal length. What is the smallest number of pennies he could have?

_____5. Write as one fraction: $\frac{a}{5}-\frac{3}{b}$.

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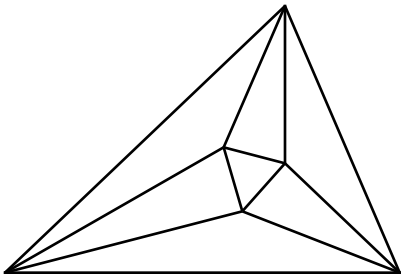
Meet 1 - Event B 2003-2004

Answers



Questions are worth 2-2-2-4-4 points respectively.
Remember your units.

$-\frac{5}{3}$ 1. $\frac{-4+9}{-3} = \frac{5}{-3}$ or $\frac{-5}{3}$ or $-\frac{5}{3}$

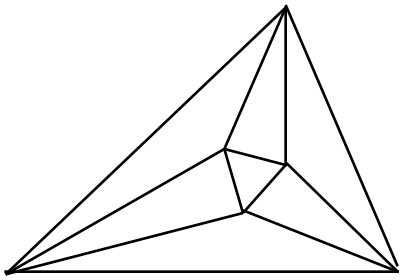
4 ounces 2. 1 lb 2 oz = 16 + 2 = 18 oz, 18 oz - 14 oz = 4 oz
unit is required

2:35 3. 2:20 PM = 14:20 so 14:20 - 11:45 = 13:80 - 11:45 = 2:35
or 2 hr 35 min

420 4. 14 = 2 x 7, 15 = 3 x 5, 20 = 2 x 2 x 5 LCM = 14 x 15 x 2 = 420

$\frac{ab-15}{5b}$ 5. $\frac{a}{5} - \frac{3}{b} = \frac{ab}{5b} - \frac{5 \bullet 3}{5b} = \frac{ab-15}{5b}$

Meet 1 - Event C 2003-2004



Questions are worth 2-2-2-4-4 points respectively.
Remember your units.

_____1. Solve for x: $5.76 - x = -14.98$.

_____2. There are two pairs of numbers that have a Greatest Common Factor of 5 and a Least Common Multiple of 30. One pair is 5 and 30. Find the other pair.

_____3. Under what conditions is: $\frac{a}{b} = \frac{c}{2b}$?

_____4. Solve for x: $\frac{5}{8} - \frac{6}{x} = \frac{12}{x}$

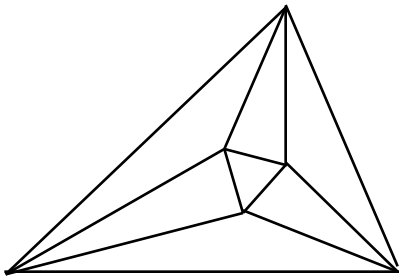
_____5. Find the sum $a+b+c$.

$$\frac{18}{7} = a - \frac{1}{b - \frac{2}{c}}$$

Name_____School_____

Meet 1 - Event C 2003-2004

Answers



Questions are worth 2-2-2-4-4 points respectively.
Remember your units.

20.74 1. $-x = -14.98 - 5.76 = -20.74, \quad x = 20.74$

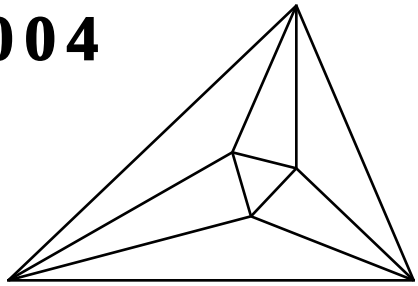
10, 15 2. GCF = 5 $\therefore$ 5, 10, 15, 20, 25, 30 are possible
LCM = $2 \bullet 3 \bullet 5$ $\therefore$ 2, 3, 5, 6, 10, 15, 30 are possible
So the possible values are 5, 10, 15, 30. Only 10 and 15 will work.

$c = 2a$ 3. $\frac{a}{b} = \frac{2a}{2b}$. so $c = 2a$
or $a = \frac{1}{2}c = 0.5c = \frac{c}{2}$

28.8 4. $\frac{5}{8} = \frac{12}{x} + \frac{6}{x} = \frac{18}{x}, \quad 5x = 8(18) = 144, \quad x = 28.8$

9 5. $\frac{18}{7} = 3 - \frac{1}{\frac{7}{3}} = 3 - \frac{1}{3 - \frac{2}{3}} \quad 3 + 3 + 3 = 9$

Meet 1 - Team Event 2003-2004



Questions are worth 4 points each.
Remember your units.

_____1. Find the sum $a+b$. $\frac{18}{7} = 4 - \frac{1}{a - \frac{3}{b}}$

_____2. If 1 is not counted as a prime number, what is the 10th prime number?

_____3. At Breezy Point, the moon rise and set times on a 24 hour clock for each date are shown below:

August

Date	Rise	Set
25	20:41	07:59
26	20:53	09:02
27	21:17	10:04

Marcy saw the moon at 7 AM on August 26th. How long had the moon been above the horizon when she saw it?

_____4. Write as one improper fraction: $4 + \frac{1}{2 + \frac{3}{4}}$

_____5. How may factors does 17640 have?

_____6. Marcus was asked to estimate the cost of an order by rounding to the nearest dollar so he could add in his head. The items cost $12.45, $8.35, $2.40, and $3.62. What was his estimated cost?

_____7. On the AMC-10 math test you earn 6 points for a correct answer, 0 points for a wrong answer, and 2.5 points for leaving the answer space blank. There are 25 questions. How many must you get correct with no wrong answers to score 100 or more?

_____8. This number is divisible by 9: 2,n1n,3n2,nn2. What is the digit n?

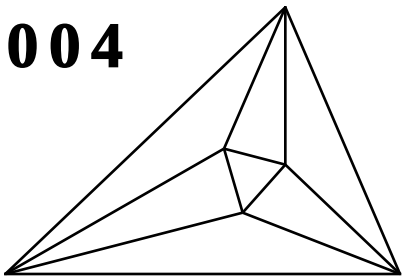
_____9. Find the Greatest Common Factor of these numbers:
240, 360, 588, 2100.

_____10. Jim, Tom, Sam, and Joe divided up $720 made by mowing lawns according to how many lawns each mowed. Jim mowed 2/3 as many as Tom, and Tom mowed twice as many as Sam. Joe mowed three times as many as Sam. How much money did Jim make?

 School_____

Meet 1 - Team Event 2003-2004

Answers



Questions are worth 4 points each.
Remember your units.

11 1. $\frac{18}{7} = 4 - \frac{1}{1 - \frac{3}{10}}$ $1 + 10 = 11$

29 2. 2, 3, 5, 7, 11, 13, 17, 19, 23, 29

10hr 19min or 10:19 3. From 20:41 on Aug 25 to 7:00 on Aug 26: 24:00+7:00=31:00, 31:00-20:41=10:19

$\frac{48}{11}$ 4. $4 + \frac{1}{\frac{11}{4}} = 4 + \frac{4}{11} = \frac{48}{11}$

72 5. $17640 = 2^3 \bullet 3^2 \bullet 5 \bullet 7^2$ so $(3+1)(2+1)(1+1)(2+1) = 72$
Explanation: You could chose 2^0, 2^1, 2^2, or 2^3 as four possible factors using 2.

$26 6. 12+8+2+4=$26 (The actual cost is $26.82 which rounds to $27 and totally misses the point of estimating.)
$ required

11 7. $11(6) + 14(2.5) = 101$

7 8. $2 + n + 1 + n + 3 + n + 2 + n + n + 2 = 10 + 5n$, $n = 7$ gives 10+35=45 which is divisible by 9

12 9. $240 = 2^4 \bullet 3 \bullet 5$, $360 = 2^3 \bullet 3^2 \bullet 5$, $588 = 2^2 \bullet 3 \bullet 7^2$, $2100 = 2^2 \bullet 3 \bullet 5^2 \bullet 7$
GCF $= 2^2 \bullet 3 = 12$, or gcd(240, 360) = 120, gcd(120, 588) = 12, gcd(12, 2100) = 12

$140 10. To eliminate the fraction, let Sam mow 3 lawns. Sam=3, Jim=4, Tom=6, Joe=9 for a total of 22 lawns. 720/22=$35, so Jim=4x$35=$140