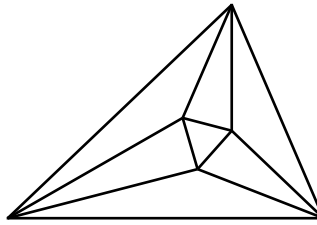


Meet 2 - Event A 2004-2005

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



_____ 1. $|2+3| - |12| - |-3| = ?$

_____ 2. Write in scientific notation: 2050000

_____ 3. What number is next in this sequence: 0, 1, 1, 2, 3, 5, 8, ___?

_____ 4. Find the midpoint between $2\frac{1}{8}$ and $3\frac{7}{16}$ as a mixed number in lowest terms.

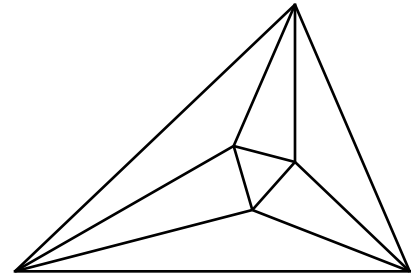
_____ 5. The number $30!$ has how many trailing zeros? For example: 70800 has two trailing zeros.

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Meet 2 - Event A 2004-2005

Answers

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



-6 1. $|9| - |12| - |-3| = 9 - 12 - 3 = -6$

2.05×10^6 2.

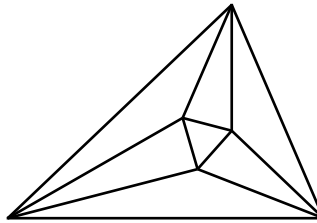
13 3. $5+8=13$

$2\frac{25}{32}$ 4. $2\frac{2}{16} + 3\frac{7}{16} = 5\frac{9}{16}$, $\frac{89}{16} \times \frac{1}{2} = \frac{89}{32} = 2\frac{25}{32}$

7 5. If you write out $1 \cdot 2 \cdot 3 \cdot \dots \cdot 29 \cdot 30$, the numbers 10, 20, and 30 will give you three zeros. The numbers 5 and 15 will give you two zeros and 25 ($5 \cdot 5$) will give you two more when multiplied by any even number.

Meet 2 - Event B 2004-2005

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



_____ 1. Write the algebraic expression for the product of four times a number, n , and 5 less than the number.

_____ 2. Solve for x : $2^x = 128$.

_____ 3. If the coordinate of A is -10.15 and the coordinate of B is -14.35 and B is one-fourth of the way from A to C , what is the coordinate of C ?

_____ 4. Find all the possible values for x : $|3 - x| = 7$.

$B =$ _____ 5. $\frac{A!}{B!} = 132$ Find two possible values for B .

$B =$ _____

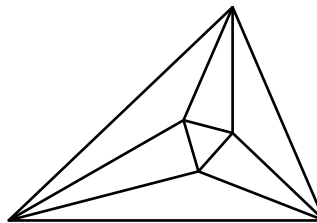
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Meet 2 - Event B 2004-2005

Answers

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



$4n(n-5)$ 1.

7 2. $2^7 = 128$

-26.95 3. $-14.35 - -10.15 = -4.2$
 $-4.2 \times 4 = -16.8$
 $-10.15 + -16.8 = -26.95$

-4, 10 4. $3 - x = 7$ or $3 - x = -7$
 $-x = 7$ or $-x = -10$
 $x = -7$ or $x = 10$

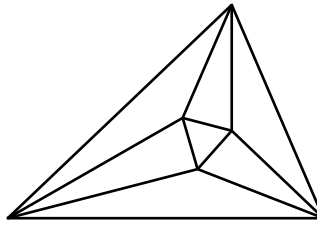
B= 131 5. $\frac{132!}{131!} = 132$

B= 10. $\frac{12!}{10!} = 12 \cdot 11 = 132$

2 points for each answer

Meet 2 - Event C 2004-2005

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



_____ 1. If $a < b$, which number is largest?

$$\left(\frac{a}{b}\right)^2 \text{ or } \left(\frac{a}{b}\right)^0 \text{ or } \left(\frac{b}{a}\right)^{-3}$$

_____ 2. Write as a fraction with all positive exponents: $3a^{-3}b^2c^{-2}d$.

_____ 3. What number is next in this sequence: 0, 1, 1, 2, 3, 5, 8, ___?

_____ 4. Solve for both values of x : $|3x - 3| = |x|$

_____ 5. The number $30!$ has how many trailing zeros? For example: 70800 has two trailing zeros.

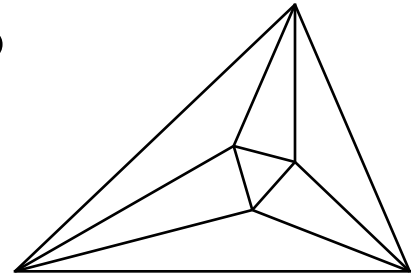
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Meet 2 - Event C 2004-2005

Answers

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



$\left(\frac{a}{b}\right)^0$ 1. $\left(\frac{b}{a}\right)^{-3} = \left(\frac{a}{b}\right)^3$ If $a < b$, $\left(\frac{a}{b}\right)$ raised to any positive number is less than 1
and $\left(\frac{a}{b}\right)^0 = 1$.

$\frac{3b^2d}{a^3c^2}$ 2.

13 3. $5 + 8 = 13$

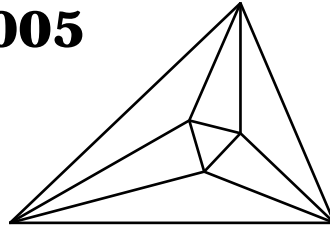
1.5 4. $3x - 3 = x$ $3x - 3 = -x$
 $2x = 3$ $4x = 3$
0.75 $x = 1.5$ $x = 0.75$

2 points for each answer

7 5. If you write out $1 \cdot 2 \cdot 3 \cdot \dots \cdot 29 \cdot 30$, the numbers 10, 20, and 30 will give you three zeros. The numbers 5 and 15 will give you two zeros and 25 ($5 \cdot 5$) will give you two more when multiplied by any even number.

Meet 2 - Team Event 2004-2005

Questions are worth 4 points each.
Remember your units.



- _____ 1. How many numbers not larger than 300 are multiples of 3 or 4, but not 5?

- _____ 2. Wholesome Foods had a sale on yogurt: buy 4 containers to get one free. This reduced the price of one yogurt by 9 cents. What was the original price for one yogurt?

- _____ 3. In the sequence $a, b, c, d, 0, 1, 1, 2, 3, 5, 8, \dots$ determine the value of a .

- _____ 4. What is the last digit in 2003^{2005} ?

- _____ 5. What is the prime factorization of 2004?

- _____ 6. On a number line, the distance from A to B is 6, from B to C is 10, and from C to D is 2. What are all the possible distances between A and D ?

- _____ 7. What number is next: 3, 4, 8, 17, 33, 58, ____?

- _____ 8. Three consecutive integers have a product of 2730. What is the smallest of these integers?

- _____ 9. What is the next number: 3, 14, 25, 36, ____?

- _____ 10. There are three values of x for which $x^2 = 2^x$. One is $x = -0.7666647$. What are the other two?

