

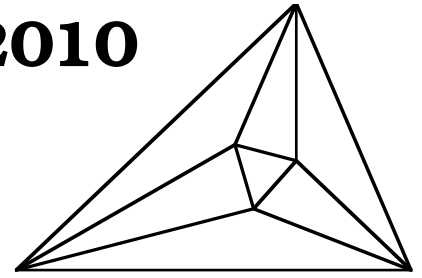
Meet 1 - Team Event

2009-2010

Answers

Questions are worth 4 points each.

Remember your units.



7 1. $\frac{3x}{14} - \frac{7}{14} = \frac{14}{14}$, so $3x - 7 = 14$, $3x = 21$, $x = 7$

$\frac{n(n+1) = n + 707}{\text{or } n^2 = 707}$ 2. $n(n+1) = n + 707$, $n^2 + n = n + 707$, $n^2 = 707$

$\frac{2^4 \cdot 5^1 \cdot 7^1}{\text{or } 2^4 \cdot 5 \cdot 7}$ 3. $560 = 2 \cdot 2 \cdot 2 \cdot 2 \cdot 5 \cdot 7$

12:48 pm 4. From noon until 1 is 60 minutes.
 $4x + x = 60$, $5x = 60$, $x = 12$, $60 - 12 = 48$

$1\frac{1}{20}$ 5. $\frac{3 \cdot 5}{20} + \frac{2 \cdot 4}{20} - \frac{1 \cdot 2}{20} = \frac{15 + 8 - 2}{20} = \frac{21}{20}$

9 6. $63 = \underline{3} \cdot \underline{3} \cdot 7$, $81 = \underline{3} \cdot \underline{3} \cdot 3 \cdot 3$, $108 = \underline{3} \cdot \underline{3} \cdot 3 \cdot 4$, GCF=9

$\frac{4}{11}$ 7. There are 11 letters and 4 of them are "i"

2 8. $\frac{\cancel{1}^1}{\cancel{1}^1} \times \frac{\cancel{3}^4}{\cancel{3}^2} + \frac{1}{\cancel{3}^3} \times \frac{\cancel{4}^2}{\cancel{1}^1} = \frac{4}{3} + \frac{2}{3} = \frac{6}{3} = 2$

$\frac{1}{720}$ 9. The hour hand moves through $1/12$ of a circle in 60 minutes, so

$$\frac{1}{12} \div 60 = \frac{1}{12} \times \frac{1}{60} = \frac{1}{720}$$

-3 10. $12 - 20 - 3 - 2(-4) = 12 - 20 - 3 + 8 = 20 - 23 = -3$