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## Information $\mathcal{E}$ Solutions

2012-2013 Annual 6th Grade Contest
Tuesday, February 26 (alternate date: February 19), 2013

## Directions for Grading

6

- Security and Solutions Do not look at these solutions until after the contest. Detailed solutions appear in each question box, and letter answers are in the Answers columns on the right. You may copy this solution key and give a copy to every student who took this contest.
- Urgent Questions? For appeals or answers to urgent questions, write to comments@mathleague.com or call 1-201-568-6328.
- Scores Please remember that this is a contest, and not a test - there is no "passing" or "failing" score. Few students score as high as 28 points ( $80 \%$ correct). Students with half that, 14 points, should be commended.
- Awards \& Results The original contest package contained 5 Certificates of Merit - 1 each for the 3 highest scoring students on the contest, plus extras for ties. Do you need more Certificates of Merit? If so, include your name, school, and school mailing address in a letter to:
Math Certificates, P.O. Box 17, Tenafly, NJ 07670-0017, and include a self-addressed, stamped envelope (three 1st Class stamps req'd.) large enough to hold certificates. Only scores submitted to our Internet Score Report Center by Tues., March 5, 2013 can be used in our Summary of Contest Results newsletter, which will be posted online no later than Fri., April 12, 2013.
- Return of Student Papers Originals of contest papers with scores of 30 or more must be held until June 1. Copies of these papers, and originals of all other papers, should be returned to students after grading. Students scoring 30 points or more must confirm an understanding of the contest rules by signing the Selected Math League Rules (on the colored sheet of information and rules that accompanied the contests). Keep this signed sheet with the original contests until June 1. Please do not mail these to the League unless we ask you to do so.

Eighteen books of past contests, Grades 4, 5, \& 6 (Vols. 1, 2, 3, 4, 5, 6), Grades $7 \mathcal{E} 8$ (Vols. 1, 2, 3, 4, 5, 6), and High School (Vols. 1, 2, 3, 4, 5, 6), are available, for $\$ 12.95$ per volume, from Math League Press, P.O. Box 17, Tenafly, NJ 07670-0017

| 2012-2013 6TH GRADE CONTEST SOLUTIONS |  |
| :---: | :---: |
| 1. Pete the pilot flew 28 times last month. If 21 of his flights were at night, then $28-21=7$ flights were not at night. <br> A) 7 <br> B) 21 <br> C) 28 <br> D) 49 | 1. A |
| 2. The sum $12+34+56$ equals each of the following except choice D. <br> A) $46+56$ <br> B) $12+90$ <br> C) $34+68$ <br> D) $46+68$ | 2. |
| 3. If I double the number of pens in my backpack and add 5 , I get 23 . Subtract 5 and divide by 2 to get $(23-5) \div 2=9$. <br> A) 9 <br> B) 14 <br> C) 36 <br> D) 56 | 3. A |
| 4. Distribute subtraction over addition: $65-(43+21)=(65-43)-21$. <br> A) 1 <br> B) 12 <br> C) 21 <br> D) 34 | 4. C |
| 5. One dime and quarter are worth 35 . One dime less than $\$ 1$ is $90 \$$. Since $90 \Phi-35 \Phi=55 \Phi$, the coins in my pocket are worth $55 \$$. <br> A) $45 ¢$ <br> B) $55 ¢$ <br> C) $65 \varnothing$ <br> D) $75 \phi$ | 5. |
| 6. Five days before Wednesday is Friday. <br> A) Friday <br> B) Sunday <br> C) Monday <br> D) Tuesday | 6. A |
| 7. Since each choice is odd, 2 must be one of the addends. <br> A) $11=2+9$ <br> B) $17=2+15$ <br> C) $23=2+21$ <br> D) $31=2+29$ | 7. D |
| 8. Each of my shoes weighs the same. If 2 of my shoes weigh 12 kg together, then the total weight of 12 of my shoes is $6 \times 12 \mathrm{~kg}=72 \mathrm{~kg}$. <br> A) 2 kg <br> B) 24 kg <br> C) 36 kg <br> D) 72 kg | 8. D |
| 9. $25 \times 25=5 \times 5 \times 25$. <br> A) 2 <br> B) 5 <br> C) 10 <br> D) 25 | 9. $\mathrm{D}$ |
| 10. $(6 \times 12)+(12 \times 2)=96=32 \times 3$. <br> A) 48 <br> B) 32 <br> C) 24 <br> D) 12 | $\begin{gathered} 10 . \\ \text { B } \end{gathered}$ |
| 11. Since 31 divided by 4 has a remainder of 3 , Giggles the Clown could have a total of 31 dots on his costume. <br> A) 31 <br> B) 32 <br> C) 33 <br> D) 34 | 11. |
| 12. 420 minutes $=7$ hrs.; 7 hrs. before 4 P.M. is 9 A.M. <br> A) 4:00 A.M. <br> B) $7: 00 \mathrm{~A} . \mathrm{M}$. <br> C) 9:00 A.M. <br> D) 11:40 A.M. | 12. <br> C |
| 13. $(10 \times 100)+(10 \times 10)+10=1110$. <br> A) 111 <br> B) 1101 <br> C) 1110 <br> D) 101010 | C |



