

**2013 Mu Alpha Theta National Convention  
Hustle—Geometry  
Answers**

1. 7
2.  $48^{\circ}55'12''$  (must be in DMS notation)
3.  $\frac{300-2x}{3}$  (degrees)
4. bisector (or angle bisector)
5. L
6. 72 (degrees)
7.  $\left(\frac{10}{3}, \frac{10}{3}\right)$  (or equivalent)
8. 5
9.  $y = -\frac{3}{4}x + 9$  (or equivalent)
10. 8 (inches)
11.  $2\sqrt{157}$  (units)
12. 14 (inches)
13.  $24\sqrt{3}$  ( $units^2$ )
14. 8 (inches)
15.  $\sqrt{37}$  (units)
16.  $\sqrt{3}$
17.  $\sqrt{34}$  (inches)
18. 75
19.  $2\sqrt{6}$  (inches)
20.  $\cos A, \cos B, \tan A$  (IN THAT ORDER)
21.  $200(\sqrt{6} - \sqrt{2})$  (feet) (or equivalent unfactored form)
22.  $\frac{\pi}{6}$
23.  $92\pi$  ( $units^2$ )
24. 6 (units)
25.  $\frac{207}{2}$  (degrees) or (equivalent degree measure)