

**Honors Geometry Spring Exam Review Key Chapter 6 – 11**

1. D
2. A
3. C
4. B
5. C
6. C
7. A
8. D
9. A
10. A
11. A
12. C
13. C
14. B
15. B
16. C
17. B
18. A
19. C
20. B
21. D
22. C
23. D
24. C
25. A
26. B
27. A
28. A
29. C
30. C
31. C
32. A
33. D
34. A
35. D
36.  $x = 90^\circ, y = 50^\circ$
37. C
38. B
39.  $360^\circ$
40.  $1080^\circ$

41. C  
 42. A  
 43. C  
 44. C  
 45. D  
 46. A  
 47. B  
 48. B  
 49. A  
 50. A  
 51. B  
 52. D  
 53. B  
 54.  $(x + 4)^2 + (y + 3)^2 = 36$   
 55.  $= 54\sqrt{2} \approx 76.368$   
 56.  $32 u^2$   
 57.  $= 16\sqrt{3} \approx 27.713 u^2$   
 58.  $40 u^2$   
 59.  $= 48\sqrt{3} u^2 \approx 83.138 u^2$   
 60.  $= 384\sqrt{3} u^2 \approx 665.108 u^2$   
 61. C  
 62. C  
 63. a, c, d, f  
 64.  $8u$   
 65.  $6u$   
 66.  $5u$   
 67.  $17.5 u$   
 68.  $16u$   
 69.  $36u$   
 70.  $20u$   
 71.  $X = 21u, y = 24 u, z = 36u$   
 72.  $x = \frac{35}{4}u, y = \frac{20}{3}u, z = 5u$

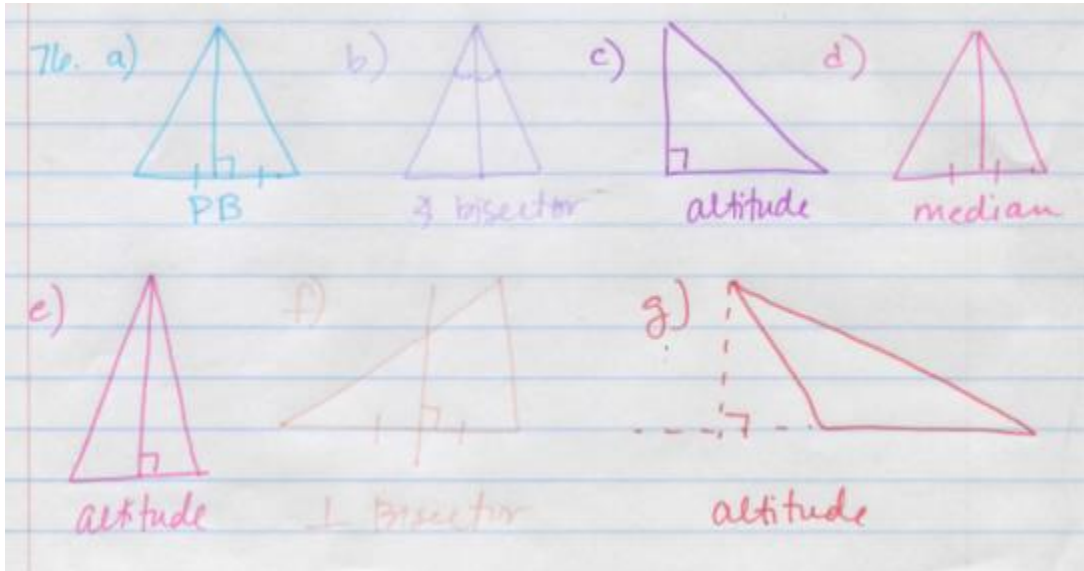
$\overline{BE} \cong \overline{EC}$	$\overline{AC} \parallel \overline{FE}$
$\overline{AD} \cong \overline{DC}$	$\overline{FD} \parallel \overline{BC}$
$\overline{AF} \cong \overline{FB}$	$\overline{DE} \parallel \overline{AB}$

73.  
 74. 4

75. An odd peanut butter cup may contain apple butter instead.

Altitude  $\rightarrow$  orthocenter  
 Perpendicular Bisector  $\rightarrow$  circumcenter (= to vertices)  
 Median  $\rightarrow$  Centroid (balance point)  
 Angle Bisector  $\rightarrow$  incenter (= to sides)

75.



76.

77. a) True, always by definition  
 b) False, never only isos. & equil.  
 c) False, all obtuse triangles  
 d) True, from vertex angles all 4 special segments are the same segments.  
 e) False, only in isos & equil.  
 f) False, must hit all 3 vertices
78.  $\frac{7}{3} < x < 12$
79. a)  $x = 3$   
 b) angle B < angle C < angle A