16-17 ACP Geometry – Final Exam REVIEW

Chapter 8

1. x=20
2. yes, AA~ 3. No 4. AA~, SAS~, SSS~
5. 58° 6. x=4 7. 1:12
8. a) 10.4 b) 29.6 c) 18
9. a) 3/7 b) 9/49
10. 304 sq. in.
11. x=13.5 y=20.25
12. x=3.4 y=4.47
13. x=28
14. x=1.78
15. y=7.2
16. x=180 y=108
17. 40 ft
18. y=7.5
19. x=6
20. a=4.5 b=7.5

Chapter 12

1. J'(1,-4), A'(3,-5), R'(2,-1)
2. J'(-1,4), A'(-3,5), R'(-2,1)
3. C

4a. S'(6,1), U'(2,-3), B'(-1,0)
4b. S'(-8,1), U'(-4,5), B'(-1,2)
4c. S'(-6,1), U'(-2,5), B'(1,2)
4d. S'(6,-1), U'(2,-5), B'(-1,-2)

5. E
6. <-2,4>
7. C
8. <4,-2>
9. Check drawn answers.
10. Check drawn answers.
11. 3/2
12. ½
13. A'(1,-1), B'(0.5,-1), C'(1,1)
14. W'(-4,4), H'(0,0), A'(0,-4), T'(-2,-4)
15. Line Symmetry: Vertical through the center
    Rotational Symmetry: None
16. Line Symmetry: Vert. and Horiz. through center
    Rotational Symmetry: 180°

Chapter 7

1. $24(36) = 27h \rightarrow 864 = 27h \rightarrow 32 = h$
2. $3\sqrt{2}\left(\sqrt{2}\right) = 3\sqrt{4} = 3 \bullet 2 = 6$
3. $x^2 = 50 \rightarrow x = \sqrt{50} \rightarrow diagonal = \sqrt{50}\left(\sqrt{2}\right) = \sqrt{100} = 10$
4. $s\sqrt{3}$
5. $6\sqrt{3}$
6. $x = 17\sqrt{3} \qquad y = 34$
7. $\frac{1}{2}(6+10)\left(4\sqrt{3}\right) = 32\sqrt{3}\ ft^2$
8. $\frac{1}{2}(9.2)(8) = 36.8\,ft^2$
9. $\frac{1}{2}(16)(16) = 128m^2$
10. Radius of each circle is $1in$, therefore each side of the square is $2in$.

    Area of square $= 4in^2$, area of circle $= 1\pi\ in^2$

    Square – Circle → $(4-\pi)in^2$
11. $\frac{1}{2}(2)(5.4) = 5.4cm^2$
12. $x^2 + 6^2 = 15^2 \rightarrow x = \sqrt{189} = \sqrt{9} \bullet \sqrt{21} = 3\sqrt{21}$
13. 5.5 sq.in
14. 66.2 sq.in
15. 41.9 sq.in
16. 23.085 sq.in
17. 126.6 sq.in
18. 16.7 in
19. 7 in
20. 50.2 in

Chapter9

1. x=13.76
2. x=13.95
3. x=3.85
4. x=24.50
5. x=51.32
6. x=57.99
7. Hypotenuse = 32,616.19969 ft

Chapter 10

1. 6 gallons of paint
2. L.A. = 279.84 cm^2
   S.A.= 423.84 cm^2

   L.A. = 126 u^2

   L.A.= 439.6 in^2
   S.A.= 747.32 in^2

L.A.= 141.3 cm^2
S.A.= 169.56 cm^2

3. V= 308 ft^3
4. V=17m^3
5. V=490π in^3
6. V= 438 mm^3
7. V=480cm^3
8. V= 829 m^3
9. S.A.= 256π cm^2
10. V=523 mm^3 or 524 mm^3
11. V= 1766 cm^3 or 1767 cm^3

Chapter 11

1. 38°
2. 66°
3. 12
4. 72 cm
5. 74 in
6. 18
7. 12
8. 5
9. 48.5°
10. x = 78.5°, y = 64°
11. x = 105°, y = 133.5°, w = 26°
12. $(x-2)^2+(y+7)^2=49$
13. $(x+10)^2+(y+5)^2=125$
14. $(x-4)^2+(y-2)^2=16$
15. $C(5, -9)$; $r = 6\sqrt{2}$

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