

Key HW3 p 590-593 Geo C8

8. $8\sqrt{2}$

9. $\frac{15\sqrt{2}}{2}$ or $7.5\sqrt{2}$

10. 34

11. $18\sqrt{6}$

12. $19.5\sqrt{2}$

13. $20\sqrt{2}$

14. $\frac{9\sqrt{2}}{2}$ or $4.5\sqrt{2}$

Key HW3 p 590-593 #8-14all, 18-24all, 28-31all, 34, 46 (20) Geo C8

18. $x = 8; y = 16$

19. $x = 10; y = 20$

20. $x = \frac{15\sqrt{3}}{2}; y = \frac{15}{2}$

21. $x = \frac{17\sqrt{3}}{2}; y = \frac{17}{2}$

22. $x = 24\sqrt{3}; y = 48$

23. $x = \frac{14\sqrt{3}}{3}; y = \frac{28\sqrt{3}}{3}$

24. $12\sqrt{3}$ or 20.8 ft.

28. $x = \frac{13\sqrt{2}}{2}; y = 45$

29. $x = 3\sqrt{2}; y = 6\sqrt{2}$

30. $x = 3, y = 1$

31. $x = 5, y = 10$

34. 6 in.; 12 in.

46. Carmen; Sample answer: Since the three angles of the larger triangle are congruent, it is an equilateral triangle and the right triangles formed by the altitude are 30-60-90 triangles. The hypotenuse is 6, so the shorter leg is 3 and the longer leg, x , is $3\sqrt{3}$.