Spring Exam Study Guide Answer Key

p. 458: 20: 24.5cm

p. 465

9. Yes, 7/8. $∆$RSQ~$∆$UZX

10. Not similar

p. 474:

1. AA~; $∆ABC\~∆FGH$

2. AA~; $∆QST \~∆RSP$

5. AA~; AB = 10

6. AA~; WY = 11.25

7. Reflexive prop. for angle J. Corresponding angles to show an additional pair, then AA~ shows $∆JMN \~∆JKL$

8. SAS~ (sides that meet at point P are in the same proportion, 2:1)

p. 507

21. 10.

22. 3.333 (or 10/3)

28. 25ft 4 in or 25.333 ft

29. 3 ft

32. (0, -6)’ scale factor 2/3

p. 529

3. 4/5

4. 3/4

5. 4/5

6. 3/5

7. 4/3

8. 3/5

18. 1.56in

19. 9.65m

20. 1.21cm

p.537

13. RP = 9.42, $∠P=19°; ∠R=71°$

14. AB = 6.28, BC = 3.92, $∠C=58°$

15. YZ = 13.96, $∠Y=38°$ ; $∠Z=52°$

33. JK = 2.88; LK = 1.40; $∠L=64°$

34. DF = 2.65; $∠D= 32°$ ; $∠F=58°$

35. QR = 4.90; $∠P=36°; ∠R=54°$

p. 548

15. 1962 ft

16. 3.2 mi

24. 73°

28. D

29. J

p. 555

26. 34°

27. 20.6

28. 4.8

29. 10.4

30. 37°

31. 65°

46. 25.6 cm

47. 41.2ft

48. 20.2 in

p. 593

4. 240 square meters

7. d2 = 25 m

23. 51.96 sq cm

24. 30 sq meters

25. 300 sq in

p. 603

12. 10/π ft

15. 13.3 sq ft

16. 1582.5 sq in

17. 14.5 sq ft

28. 222.5 sq in

43. B

44. F

p. 609:

2. 40 sq cm

3. 16.3 sq ft

4. 115.7 sq in

5. 17.5 sq cm

18. 2347.92 sq m

19. 161.11 sq in

20. 122.52 sq cm (39π)

p. 620

12. P = 24 units, A = 24 sq units

p. 625

1. Area is doubled

2. Area is multiplied by 1/3

3. Perimeter is tripled; area is multiplied by 9

4. Perimeter is multiplied by ½, area by ¼

5. Side length is multiplied by sqrt(2)

6. Circumference is multiplied by sqrt(3)

p. 810

6. Chord: KH and MN; Tangent: KL; Radii: JK, JN, JH, JM; Secant: MN; diam: KH, NM

11. 81°

12. 210°

13. 99°

14. 279°

15. 17

16. 8.7

17. 12π; 37.70

18. π/4; 0.79

19. 16π; 50.27

20. 3π; 9.42

25. 82°

26. 79°

27. 67°

29. y= 11.67

30. z = 12