Geometry B Semester Review
Chapters 7-12

[1] True

[2] True

[3] True

[4] False

[5] False

[6] False

[7] False

[8] False

[9] True

[10] True

[11] False

[12] True

[13] False

[14] True

[15] False

[16] False

[17] False

[18] C

[19] D

[20] B

[21] B

[22] B

[23] A

[24] D

[25] $a = 37°$, $b = 74°$, $c = 53°$, $d = 127°$, $e = 53°$

[26] $m\widehat{YE} = 76°$, $m\angle OGE = 25°$, $m\angle MOG = 52°$, $m\angle MER = 25°$, $m\angle GUM = 115°$

[27] translation

[28] $\sqrt{97}$ units

[29] $(3, \; -9)$

[30] 4 cm

[31] $12\pi \, \text{ft}^2$

[32] squares

[33] $81\pi \, \text{cm}^2$

[34] $\dfrac{x}{\sqrt{3}}\left(\text{or } \dfrac{x\sqrt{3}}{3}\right);\ \dfrac{2x}{\sqrt{3}}\left(\text{or } \dfrac{2x\sqrt{3}}{3}\right)$

[35] perpendicular bisector

[36] $98\ \text{cm}^2$

[37] $(0,\ -4);\ 3$ units

[38] $(x,\ -y)$

[39] $m^2 + n^2 = p^2$

[40] $150\ \text{in}^2$

[41] translation

[42] Answers will vary

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[44] No; the side lengths do not work in the Pythagorean formula $\left(\text{that is, } 5^2 + 7^2 \neq 9^2\right).$

[45] Isosceles; $LM = MN = \sqrt{20}$, while $LN = \sqrt{40}.$

[46] $6\ \text{cm}^2$

[47] $2400\ \text{cm}^2$

[48] $180\ \text{in}^2$

[49] $(18\pi - 36)\ \text{cm}^2$

[50] $7\ \text{cm}$

[51] $170\pi\,\text{ft}^2$

[52] $36\sqrt{3}\ \text{cm}^2$

[53] 6 in.

[54] congruent; proportional

[55] 35 cm²

[56] $\pi\left(\dfrac{x}{2}\right)^2 h$, or $\dfrac{\pi x^2 h}{4}$

[57] parallel

[58] mass; volume

[59] $\dfrac{512}{729}$

[60] $\dfrac{3}{4}$

[61] 54 cm²

[62] 175.93 cm³

[63] $x = 18$ cm, $y = 12$ cm

[64] 21.85 cm

[65] 10 cm

[66] 51.42 cm³

[67] 11.11 cm

[68] 3 cm

[69] 34.56°

[70] 23.54 cm

[71] 8.97 g/cm^3

[72] 84 ft, or 28 yd

[73] 66 m