

MATH 213 / E1, E2, E3 Final Review Questions, 2010

TRUE OR FALSE QUESTIONS

32. Every equilateral triangle is isosceles. T
33. A rhombus is a regular polygon. F
34. Every hexagon is a regular polygon. F
35. The acute angles of a right triangle are complementary. T
36. The acute angles of a right triangle are supplementary. F
37. If two angles are supplementary, one must be either right or obtuse. T
38. Every prism has a square base. F
39. A quadrilateral may have all acute angles. F
40. A quadrilateral may have both a right angle and an obtuse angle. T
41. A semi-regular tessellation can be made using only regular hexagons and squares. F
42. Every prism has rectangular lateral faces. F
43. Some scalene triangles are right triangles. T
44. Every pyramid has isosceles triangles sides. F
45. All quadrilaterals have at least two lines of symmetry. F
46. The top of a cone is called a vertex or apex. T
47. Any two regular polygons that tessellate by themselves can be used together to create a semi-regular tessellation. F
48. If a polygon is concave, then it must have a reflex angle. T
49. All regular polygons are convex. T
50. 4 quarts = 128 ounces T
51. If the area of a circle doubles, so does the radius. F
52. If the surface area of two cylinders is the same, then the cylinders have the same volume. F
53. A cube of with side length 10cm would fit inside of a circle with diameter 10cm. False (this makes no sense)
54. 25° C is warmer than 50° F. T
55. The volume of a right pyramid is 3 times the volume of a right prism with the same base and height. F
56. The diagonals of a kite intersect at right angles. T
57. All right triangles are similar. F
58. Triangle 1 has side lengths 2 cm, 3 cm and 5 cm. Triangle 2 has side lengths 2 cm, 3 cm and 5 cm. Triangle 1 and Triangle 2 must be similar. T
59. If a rectangular prism is scaled by a factor of 3, the surface area increases by a factor of 6. F
60. Triangle 1 has angles 40°, 40° and 100° and Triangle 2 has angles 40°, 100° and 40°. Triangle 1 and Triangle 2 must be congruent. F