

Geometry Chapter 11 Practice Test 2

Name _____

Consider the following equations of circles. Give the center and radius of each.

- $x^2 + (y + 4)^2 = 36$ Center = _____ Radius = _____
- $(x + 3)^2 + (y + 1)^2 = 16$ Center = _____ Radius = _____
- $(x - 6)^2 + (y + 7)^2 = 1$ Center = _____ Radius = _____
- $x^2 + (y - 2)^2 = 9$ Center = _____ Radius = _____
- $x^2 + y^2 = 100$ Center = _____ Radius = _____
- $(x - 12)^2 + (y + 42)^2 = 144$ Center = _____ Radius = _____
- $(x - 11)^2 + (y + 1)^2 = 121$ Center = _____ Radius = _____

Give the equation of the circle that has the given center and given radius.

- Center = (0, 5) Radius = 5 Equation = _____
- Center = (-1, 0) Radius = 3 Equation = _____
- Center = (0, -20) Radius = 2 Equation = _____
- Center = (-2, -70) Radius = 12 Equation = _____
- Center = (-5, -13) Radius = 4 Equation = _____
- If A = (-7, -4) and it is reflected over the y-axis, where will it land? _____
- If A = (-5, 5) and it is reflected over the x-axis, where will it land? _____
- If A = (-11, -41) and it is reflected over the line $y = 4$, where will it land? _____
- If A = (0, 0) and it is reflected over the line $x = 2$, where will it land? _____
- If A = (23, -60) and it is reflected over the line $y = x$, where will it land? _____
- If A = (-41, 22) and it is reflected over the line $y = x$, where will it land? _____
- Circle the shapes below that don't have any type of symmetry

Regular Pentagon Parallelogram Isosceles Trapezoid Capital letter L Scalene Triangle

- Which line of reflection maps point A at (-2, 2) to point A' at (2, 2)?
A.) $y = 4$ B.) $x = -4$ C.) $y = -4$ D.) $x = 4$ E.) x-axis F.) $y = x$ G.) y-axis

21. Which line of reflection maps point A at $(-3, 3)$ to point A' at $(3, -3)$?
 A.) $y = 4$ B.) $x = -4$ C.) $y = -4$ D.) $x = 4$ E.) x-axis F.) $y = x$ G.) y-axis
22. Which line of reflection maps point A at $(-2, 7)$ to point A' at $(2, 7)$? _____
 A.) $y = 4$ B.) $x = -4$ C.) $y = -4$ D.) $x = 4$ E.) x-axis F.) $y = x$ G.) y-axis
27. Give the equation of the circle whose diameter has endpoints at $(-2, 2)$ and $(4, 2)$?

Given the point and the translation, tell where the new point will be.

28. Point = $(0, -51)$ Translation = $(x + 5, y - 2)$ New Point = _____
29. Point = $(-31, -44)$ Translation = $(x, y + 3)$ New Point = _____
30. Point = $(-31, -335)$ Translation = $(x - 3, y)$ New Point = _____

- _____ 31. If the radius of a circle is quintupled, how much larger is the area?
- _____ 32. If the radius of a circle is increased by 5%, how much larger is the area?
- _____ 33. If the radius of a circle is multiplied by 8, how much larger is the area?
- _____ 34. If the radius of a sphere is multiplied by 4, how much larger is the volume?
- _____ 35. The volumes of two spheres are in a ratio of 8:27. What is the ratio of their radii?
- _____ 36. The radius of Sphere A is increased by 22%.
 How much more volume will the new sphere hold than the old Sphere A?
- _____ 37. The ratio of the radii of two pizzas is 9:10. What is the ratio of the areas?
- _____ 38. The ratio of the volume of two spheres is 1:64. What is the ratio of the lengths of the radii?
- _____ 39. The height and radius of a cone are each increased by 20%.
 How much larger is the volume of the cone?
- _____ 40. The height of a cylinder is doubled and the radius is tripled.
 How much larger is the volume of the cylinder?
- _____ 41. The ratio of the areas of two circles is 121:144. What is the ratio of the lengths of the radii?