

4-3-18 5th Geo

① $(x-3)^2 + (y+4)^2 = 16$

center: $(3, -4)$

radius: 4

② center: $(5, 0)$

radius: 8

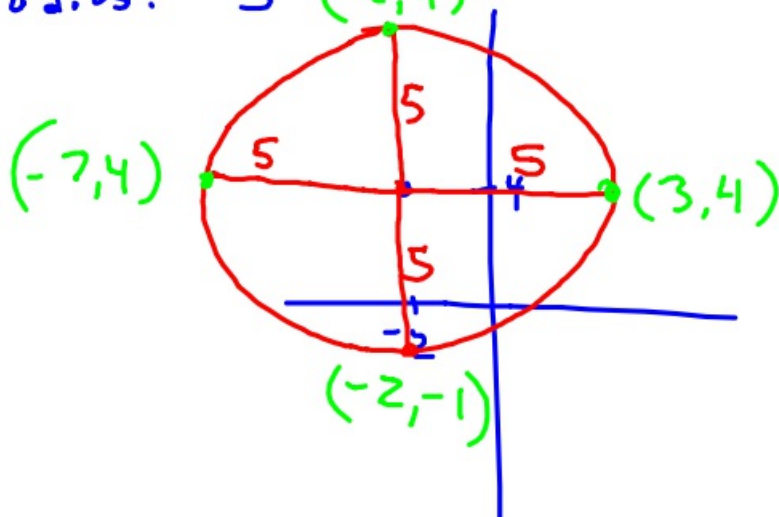
$$(x-5)^2 + y^2 = 64$$

③ Give a point that is on

$$(x+2)^2 + (y-4)^2 = 25$$

center: $(-2, 4)$

radius: 5 $(-2, 9)$



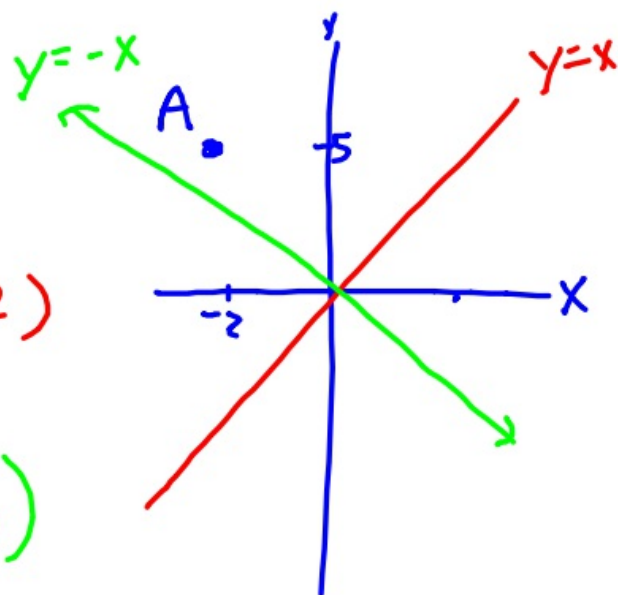
④ $A = (-2, 5)$ where is A' if it is flipped over

A.) x -axis $(-2, -5)$

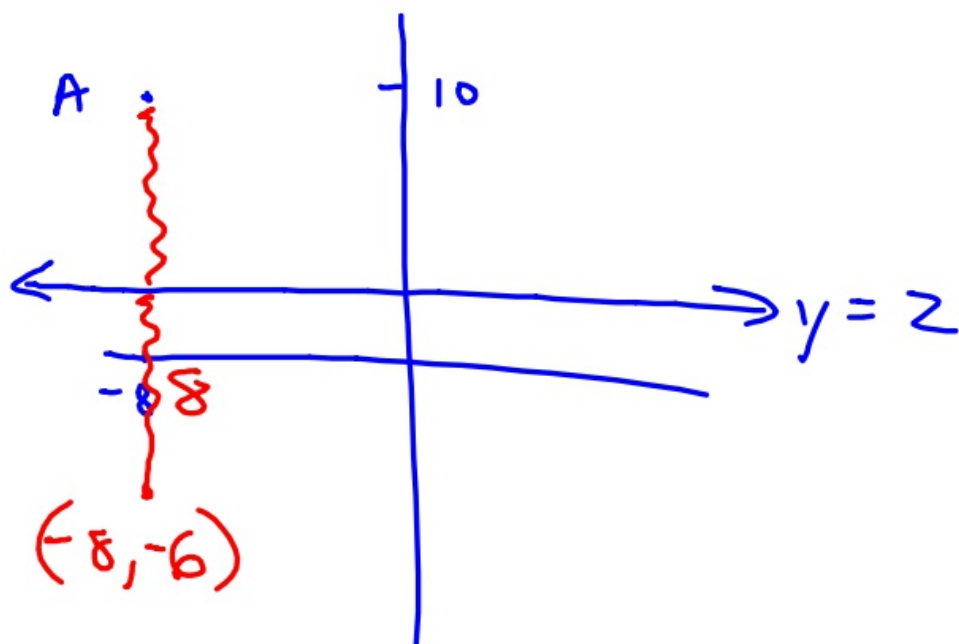
B.) y -axis $(2, 5)$

C.) line $y = x$ $(5, -2)$

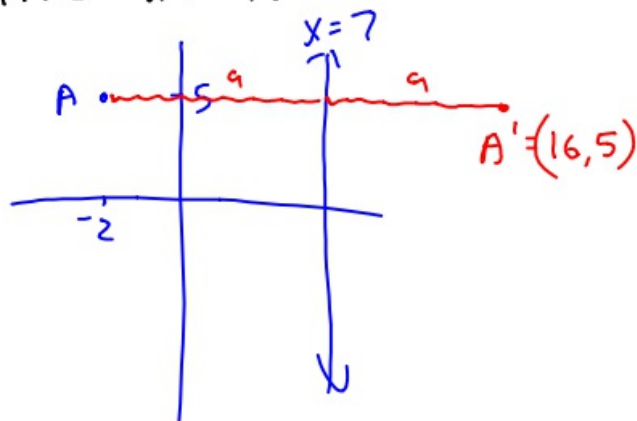
D.) line $y = -x$ $(-5, 2)$



⑤ Reflect $A = (-8, 10)$ across the line $y = 2$.



- ⑥ Flip $A = (-2, 5)$ over the line $x = 7$.



- ⑦ Point $= (-4, 3)$
Translation $= (x+2, y-10)$
New Point is $(-2, -7)$

- ⑧ $A = (-8, 6)$ If $A' = (-6, 8)$,
what line did it get reflected
over?
 $y = -x$

- ⑨ The radius of a circle is
quadrupled. What happens to
the area?

$$A = \pi r^2$$

$$A = \pi (4r)^2$$
$$\boxed{16} \pi r^2$$

- ⑩ The radius of a sphere is increased by 30%. How much more volume does it have?

$$V = \frac{4}{3} \pi r^3$$

$$V = \frac{4}{3} \pi (1.3r)^3$$

$$\frac{4}{3} \pi \boxed{2.197} r^3$$

119.7% increase

- ⑪ Ratio of areas of two circles is 4:25. What is the ratio of their radii?

$$\sqrt{4:25}$$

$$2:5$$

4-3-18 6th Geo

① $(x-3)^2 + (y+1)^2 = 36$

Center: $(3, -1)$

Radius: 6

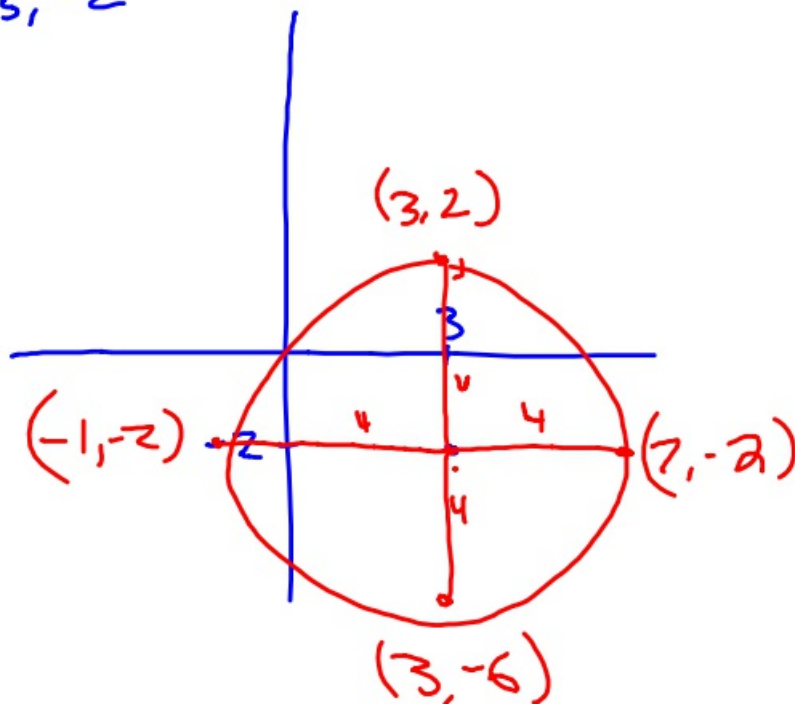
② Center: $(2, 0)$ Radius: 2

$$(x-2)^2 + y^2 = 4$$

③ Give me 4 points that are on the circle

$$(x-3)^2 + (y+2)^2 = 16.$$

C: $3, -2$



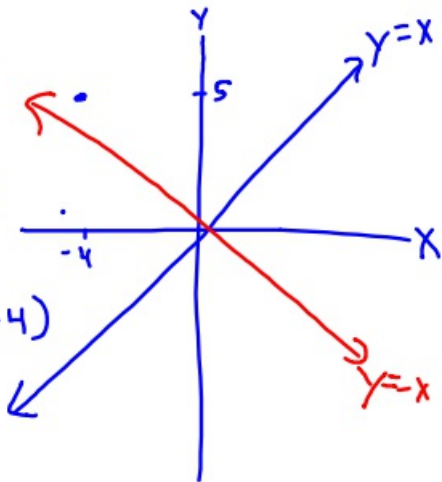
④ Flip $A = (-4, 5)$ over the

Ⓐ x-axis $(-4, -5)$

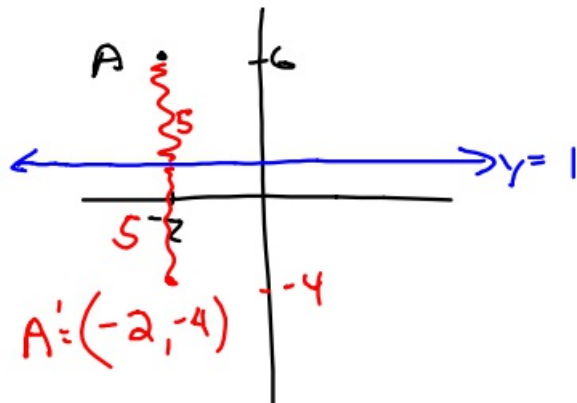
Ⓑ y-axis $(4, 5)$

Ⓒ line $y = x$ $(5, -4)$

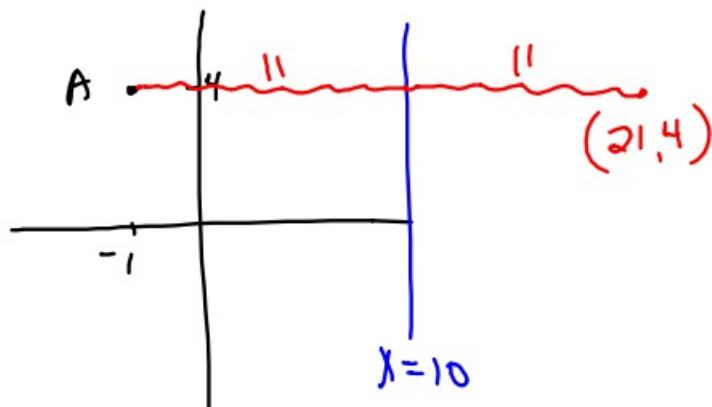
Ⓓ line $y = -x$ $(-5, 4)$



⑤ $A = (-2, 6)$. Where is A' if it is flipped over the line $y = 1$?



⑥ $A = (-1, 4)$. If A' is flipped over the line $x = 10$, where is A' ?



⑦ Point: $(-4, 10)$

Translation: $(x+5, y-2)$

New Point: $(1, 8)$

⑧ $A = (-2, 5)$ $A' = (-5, 2)$

What line was it reflected over?

$$y = -x$$

⑨ The radius of a circle is quadrupled. What happens to the area?

$$A = \pi r^2$$

$$A = \pi (4r)^2$$

$$\boxed{16} \pi r^2$$

⑩ The radius of a sphere is increased by 25%. How much larger is the volume?

$$V = \frac{4}{3} \pi r^3$$

$$V = \frac{4}{3} \pi (1.25r)^3$$

$$\approx \frac{4}{3} \pi \boxed{1.953} r^3$$

95% increase