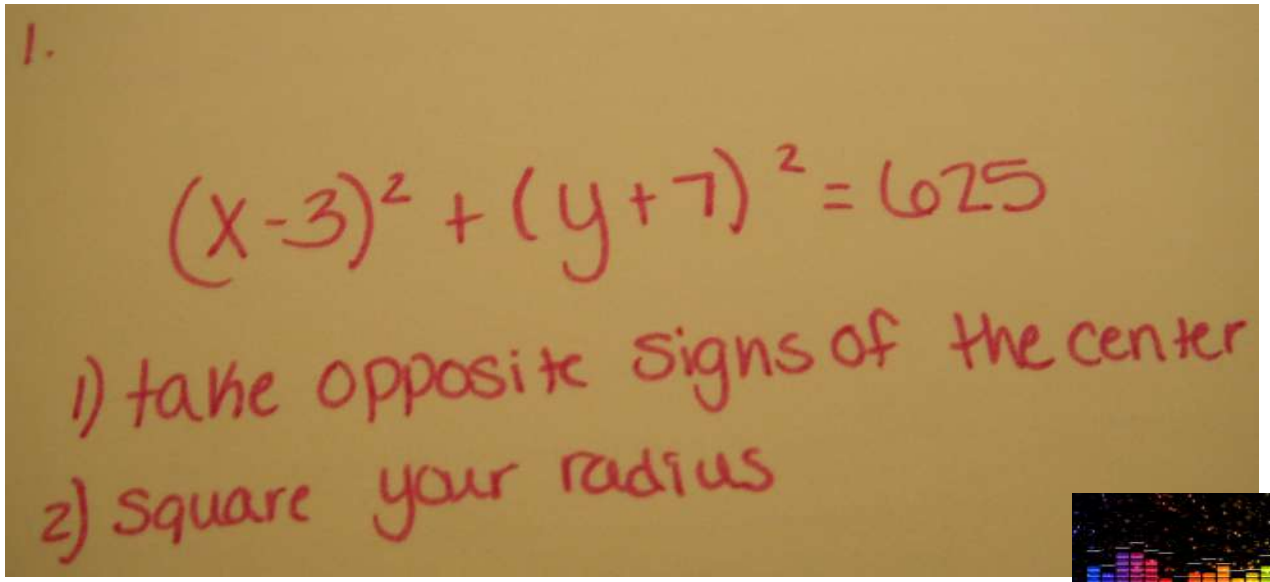
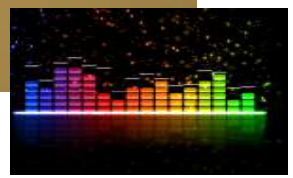
UNIT 6

MODELING GEOMETRY

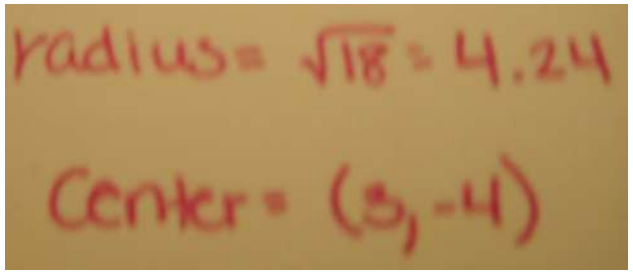
1. Write the equation of the circle with center (3, -7) and radius 25.



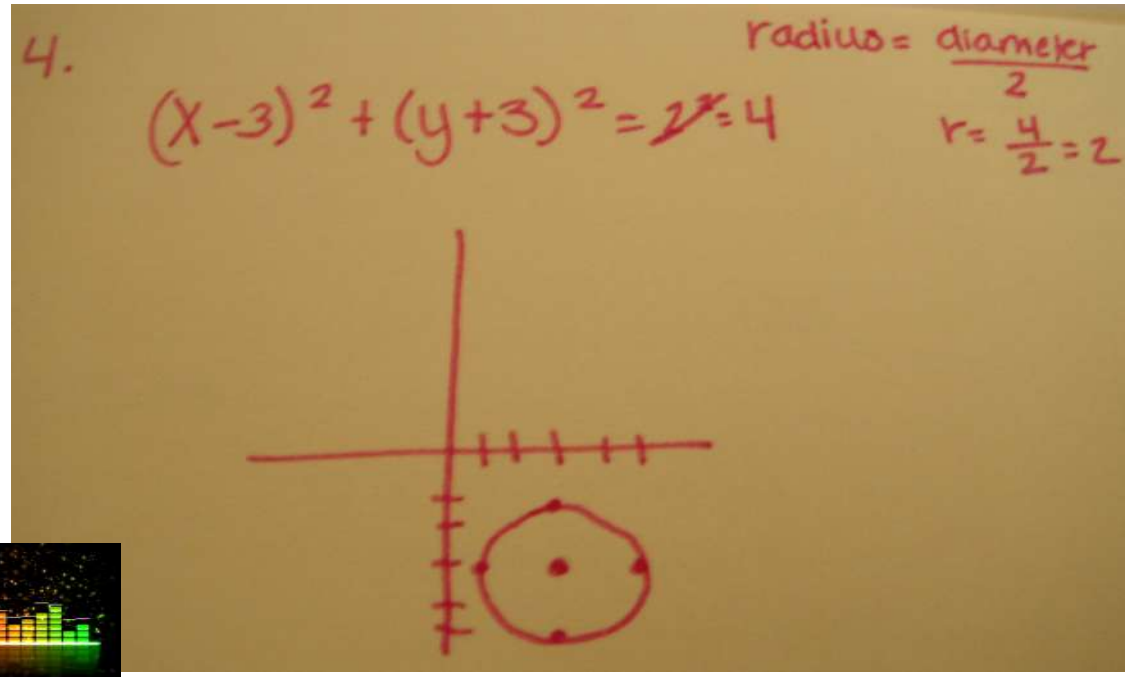


3. What is the radius and center for the circle?

$$(x-3)^2+(y+4)^2=18$$



4. Write the equation of the circle with the center (3, -3) and Diameter 4 cm. Then draw the circle.



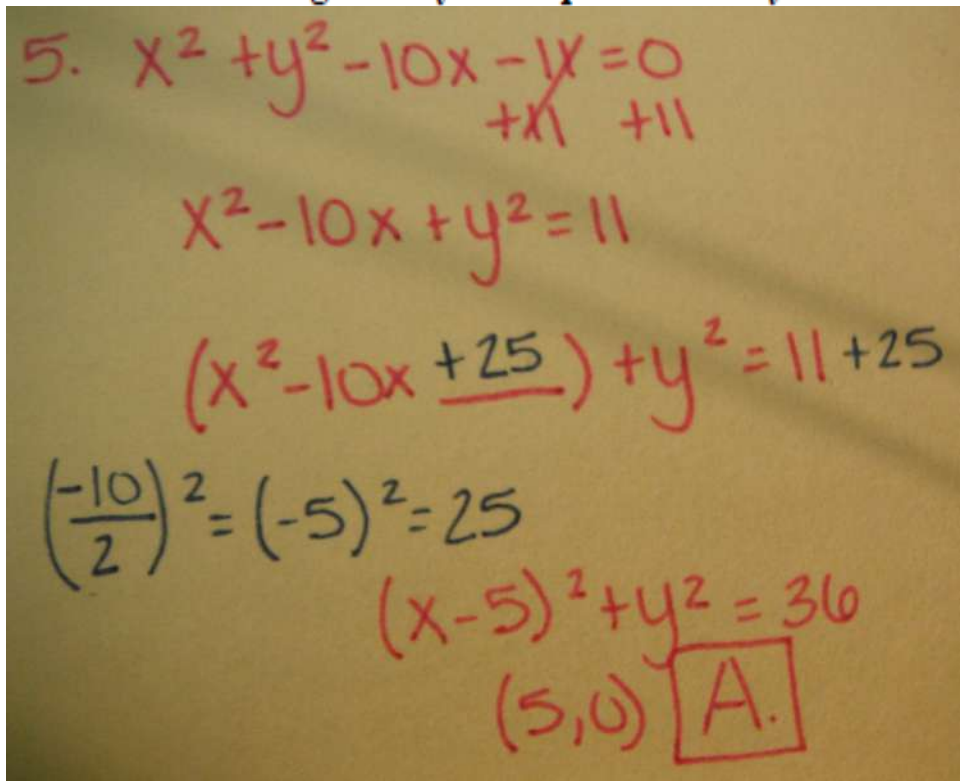
5. What is the center of the circle given by the equation $x^2 + y^2 - 10x - 11 = 0$?

A. (5, 0)

B. (0, 5)

C. (–5, 0)

D. (0, –5)



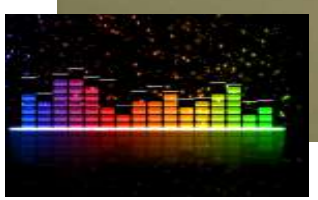
8. $(x+2)^2+(y-3)^2=9$

$(x+4+4)(y-6+9)=9-4-9$

$\sqrt{4}=2\cdot 2=4$

$\sqrt{9}=3\cdot 2=6$

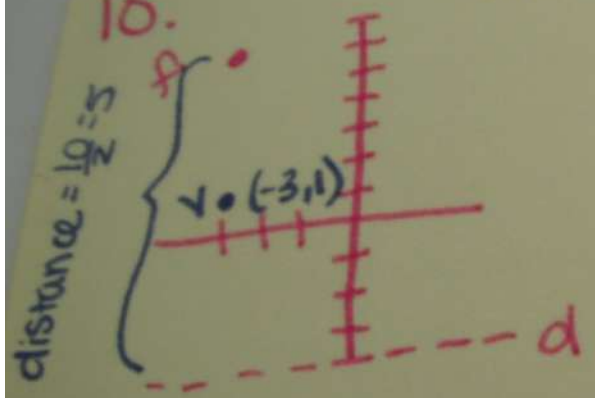
$x^2+4x+y^2-6y+4=0$



9. A straight line can only intersect a circle 2 times

C.

10.



Insert 6 from point (a, 6) & Solve for x.

$4(5)(y-1) = (x+3)^2$

$20(6-1) = (x+3)^2$

$20(5) = (x+3)^2$

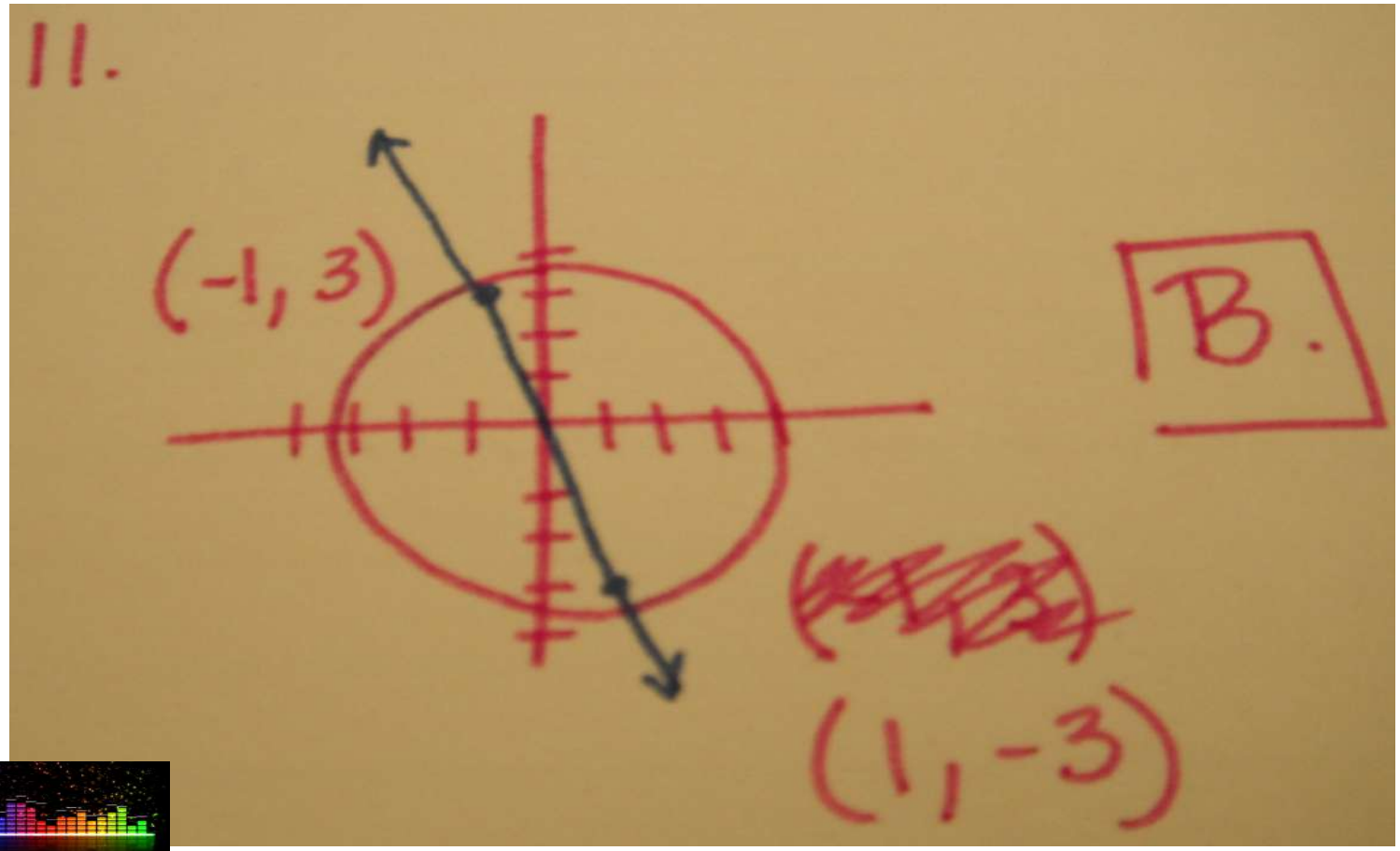
$\sqrt{100} = \sqrt{(x+3)^2}$

$10 = x+3$

$7 = x$

D.

11.



Diagonals are congruent in a rectangle.

They are NOT perpendicular!

B

13. Which point is on a circle with a center of (3, –9) and a radius of 5?

A. (–6, 5)

B. (–1, 6)

C. (1, 6)

D. (6, –5)