Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Desmond - Period 9

**Directions: SHOW ALL WORK-NO WORK, NO CREDIT**! Work independently; Mrs. Lewis will give you a zero if you work with others on this assignment.

1. Find the measure of ∠AOB in each of the following diagrams.



1. Two supplementary angles are in the ratio of 7:5. Find the value of the larger angle.
2. Which of the following sets of side lengths could represent a right triangle? (**Circle all that apply).**
3. {14,28,50} b. {8,17,21} c. {9,12,15} d. {7, 15, 17}
4. What is the length of the line between the points (2,-4) and (13, 12)?
5. $\sqrt{185} $ b. $\sqrt{377}$ c. $17$ d. $\sqrt{481}$
6. What is the center and radius of a circle whose equation is $(x-12)^{2}+ (y+5)^{2}=9$ ?
7. (12,-5) and 9 b. (12, -5) and 3 c. (-12,5) and 9 d. (-12,5) and 3
8. What is the equation of the circle below?



a. $(x-4)^{2}+(y+2)^{2}=2$

b. $(x-4)^{2}+(y+2)^{2}=4$

c. $(x+4)^{2}+(y-2)^{2}=2$

d. $(x+4)^{2}+( (y-2)^{2}=4$

1. Find the midpoint of the line AB when A(2a+4, 3b-2) and B(4a+4, b-6).
2. (3a+4, 2b-4) b. (6a+8, 4b-8) c. ( 2a, -2b – 4) d. (a, -b-2)
3. What is the slope of a line perpendicular to the line whose equation is -4*y* = −8*x* + 8?
4. $\frac{1}{2}$ b. $-\frac{1}{2}$ c. $2$ d. $-2$
5. If A(2,5) is an endpoint of line AB and M(6, 1) is the midpoint, find the coordinates of B, the other endpoint.



a. (4, 3)

b. $(10, -3)$

c. $(-2, 9)$

d. $(2, -2)$

1. The two lines 2y = 4x + 4 and y + 2x = -4 are
2. Perpendicular b. parallel c. neither d. the same line.
3. What is the equation of a line parallel to the line -4y = 1x + 8 and through the point (8, -5)
4. $y=4x-37$ b. $y= -4x+27$ c. $y= -\frac{1}{4}x+7$ d. $y= \frac{1}{4}x-3$

 

12. On the set of axes, solve the following system of equations graphically for all values of x and y

$$y=\left(x-2\right)^{2}+4$$

$$4x+2y=14$$

13. In the diagram of  shown below,  is drawn from vertex *B* to point *A* on , such that .



 In , , , and . In ,  and . [Only algebraic solutions can receive full credit.]

* Find .
* Find .
* Find the length of .
* Find the length of .