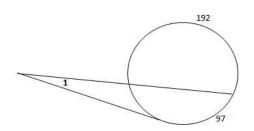
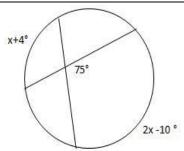
1.



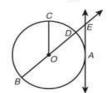
What is the value of angle one?

2.

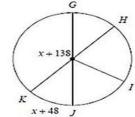


Find the value of x

3. Which is a tangent?

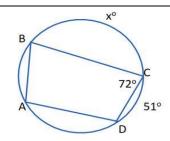


4



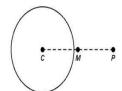
Find the Measure of the arc \widehat{KG} .

5.



Find the measure of arc BC.

6. Manuela is constructing a tangent line to circle C from point P. She has already drawn \overline{CP} and found the midpoint M, as shown below. Where should Manuela place the point of her compass to continue the construction?



- 7. The altitude of a pyramid is ______ to the base.
 - A. Congruent
 - B. Proportional
 - C. Perpendicular
 - D. Parallel

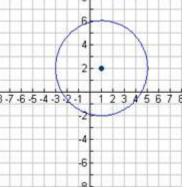
8. Find the area of circle Z in terms of π



- 9. Which figure could **NOT** represent the Cross-section of a cylinder?
 - A. A circle
 - B. A semicircle
 - C. An ellipse
 - D. A rectangle

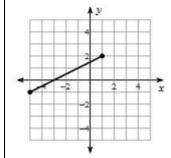
10. Find the center and radius of a circle with the Equation. $x^2 + y^2 + 6x - 8y + 16 = 0$

11.



What is the equation of the graph?

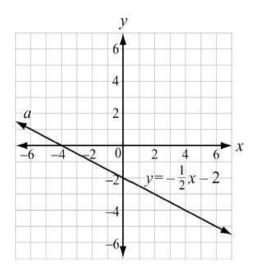
12.



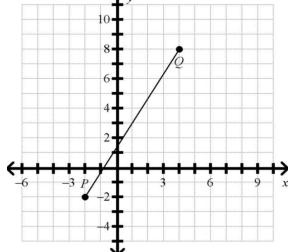
Find the distance between each pair of points.

Prove that A(-2, 3), B(4, 3), C(2, -2) and D(-4, -2) are the vertices of a *parallelogram*.

14. An equation of line a is $y = -\frac{1}{2}x - 2$. Which is an equation of the line that is perpendicular to line a and passes through point (-4, 0)?



15.



What is the midpoint of PQ?

16. The coordinates of endpoint D in CD are at D(5, 5). If the midpoint of the segment is at M(1, -1), what are the coordinates of point C?

- 17. Find the *perimeter* of $\triangle ABC$ where A(1, 1), B(4, 4), C(6, 2) are the vertices of a right triangle. Round to the nearest tenth if needed.
- 18. The volume of a solid gold statue can be approximated as 1000 cm³. If the density of gold is about 20 g/cm³, what is the mass of the statue?

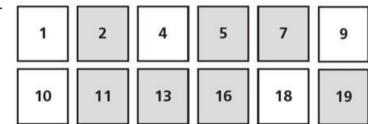
19.

	Owns a Car	Does Not Own a Car	TOTAL
Junior	6	10	16
Senior	12	8	20
TOTAL	18	18	36

Use the table to find the probability that the student is a Junior and does NOT own a car?

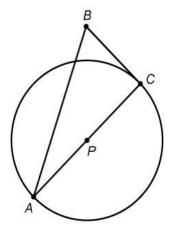
- A. 5/18
- B. 1/2
- C. 5/9
- D. 5/8

20.

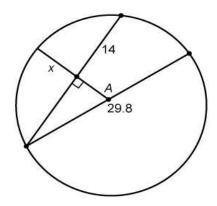


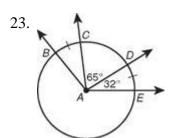
You shuffle the cards shown above and choose one at random. What is the probability that you choose a gray card or an even number?

- A. 35/144
- B. 12/19
- C. 5/6
- D. 1



22. Given circle A with diameter 29.8, find the length of the given segment x, round your answer to the nearest tenth.





Use circle *A* to find the measure of arc *BE*.

