

Name: Key Day # \_\_\_\_\_

## Geometry Unit 1 Practice Test Review

1 What is the definition of the term *line*?

- A A line is undefined.
- B A line is an infinite number of points arranged in a row.
- C A line is the shortest path between two points.
- D A line is two rays that share the same vertex and extend in opposite directions.

2 Which term used in geometry is a defined term?

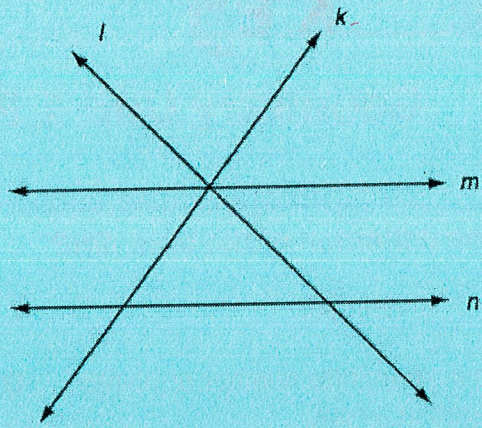
- A Line
- B Plane
- C Point
- D Line Segment

3 Circle all terms that are undefined terms in Geometry.

- A Line
- B Perpendicular Bisector
- E Plane
- G Alternate Interior Angles
- I Slope
- K Midpoint
- C Distance Formula
- D Line Segment
- F Transversal
- H Parallel Lines
- J Point
- L Segment Ratio

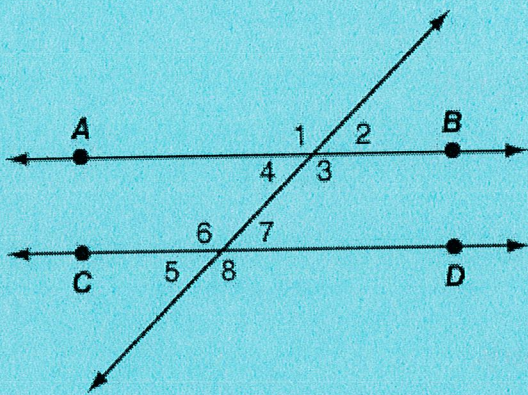


4. Which pair of lines are most likely to be transversals?



- A M and N
- B N and L
- C K and M
- D L and K**

5. Name 4 pairs of corresponding angles.



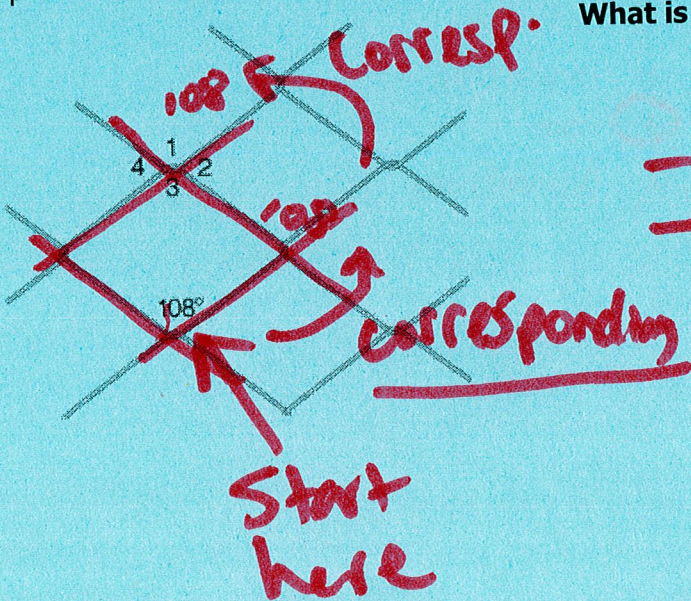
A) 1 & 6

B) 2 & 7

C) 3 & 8

D) 4 & 5

6. A portion of a chain link fence is shown below. Wires pointing in the same direction are parallel. What is the measure of angle 2?

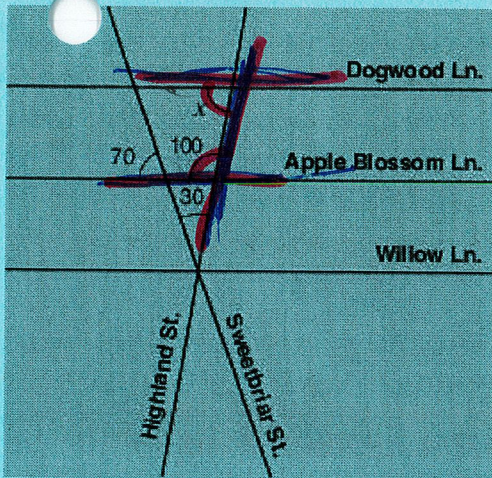


$$\begin{array}{r}
 180 \\
 - 108 \\
 \hline
 72
 \end{array}$$



Dogwood Lane, Apple Blossom Lane, and Willow Lane are parallel, as shown on the map below.

Glendale Map



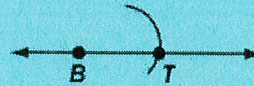
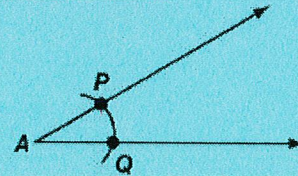
What is the value of  $x$  ?

$$\begin{array}{r} 180 \\ - 100 \\ \hline 80 \end{array}$$

(Same Side Int.)

- 8 Using a compass and straightedge, Rocco is constructing an angle congruent to a given angle.

Which of the following should be Rocco's next step in his construction?

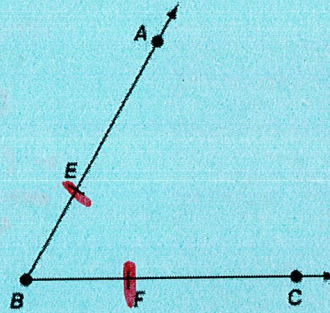


- A Use the compass to measure the distance from  $B$  to  $T$
- B Extend the line through  $B$  and  $T$  so that its length is equal to the length of the line through  $A$  and  $Q$
- C** Use the compass to measure the distance from  $Q$  to  $P$
- D Draw a line from  $B$ , with the same length as the line through  $A$  and  $P$ , which intersects the arc



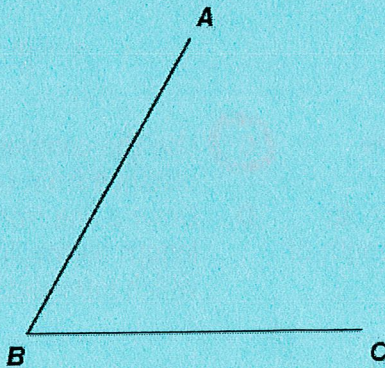
- 9 Robin is trying to bisect  $\angle ABC$ . She begins her construction by creating the arcs at point  $E$  and point  $F$ .

What should Robin do next to complete her construction?



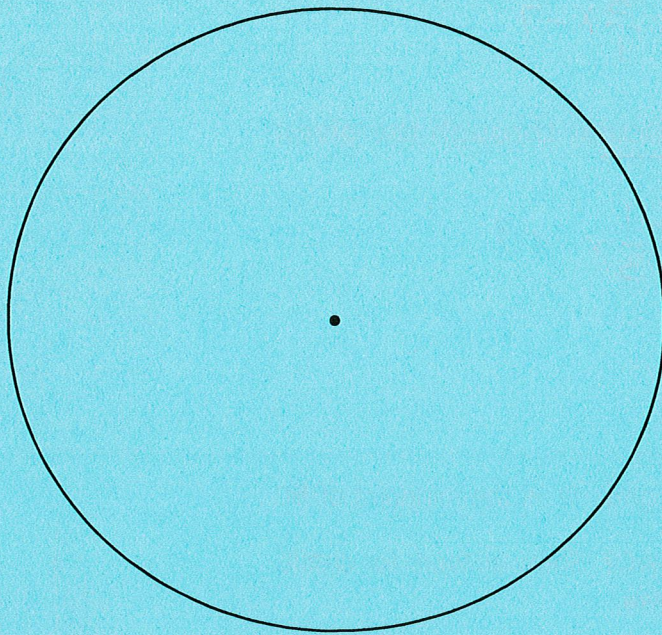
- A She should draw a segment connecting points  $A$  and  $C$ .
- B She should draw a segment from point  $E$  to point  $C$  and from point  $F$  to point  $A$ .
- C She should draw a ray from point  $B$  so that it is halfway between points  $E$  and  $F$ .
- D** She should use points  $E$  and  $F$  as centers and draw a pair of arcs, keeping the same compass setting for both arcs.

10. Using a compass and a straightedge, draw the bisector of  $\angle ABC$ . Show your marks from the compass.





11. Inscribe a hexagon.



12. What is the area of the figure on the right?

$$\square = 2 \times 15 = 30$$

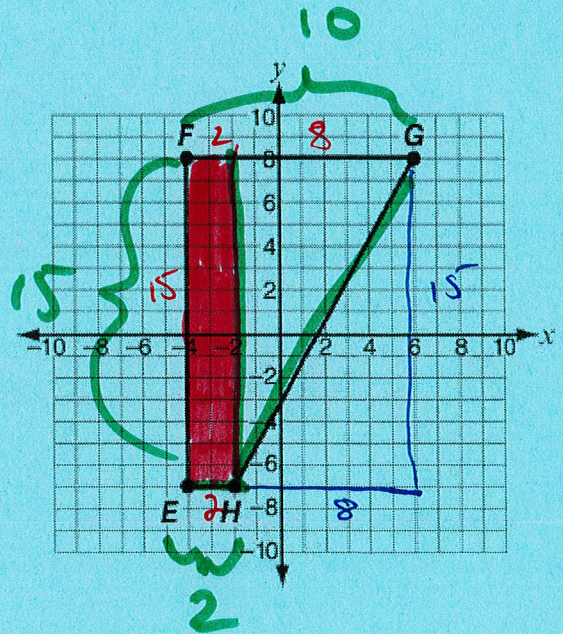
$$\triangle = \frac{15 \times 8}{2} = \frac{60}{2} = 30$$

13. What is the perimeter of the figure on the right?

15 ✓  
10 ✓  
2 ✓

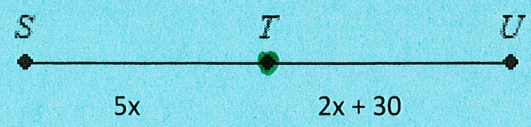
} straight lines  
→ diagonal

$$\sqrt{8^2 + 15^2} = \frac{17}{44}$$



14.

If  $T$  is the midpoint of  $\overline{SU}$ , find the values of  $x$  and  $ST$ . The diagram is not to scale.



$$5x = 2x + 30$$

$$\begin{array}{r} 5x = 2x + 30 \\ -2x \quad -2x \\ \hline 3x = 30 \\ x = 10 \end{array}$$

$$\left. \begin{array}{l} \frac{ST}{5(10)} \\ = 50 \end{array} \right\}$$

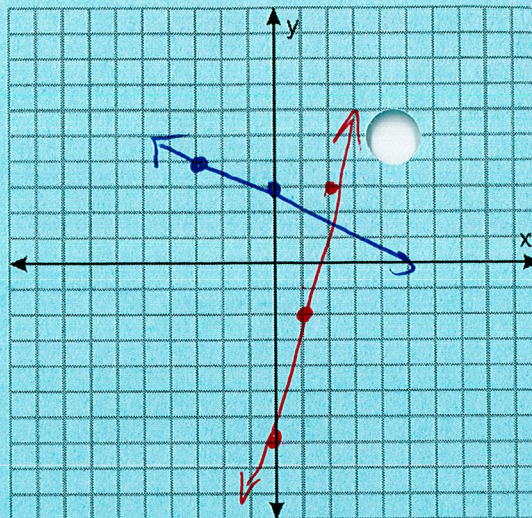


15. What is the line parallel through the given the point?

$$y = 5x + 10 \quad (1, -2) \quad y = \frac{5}{1}x - 7$$

16. What is the line perpendicular through the given point?

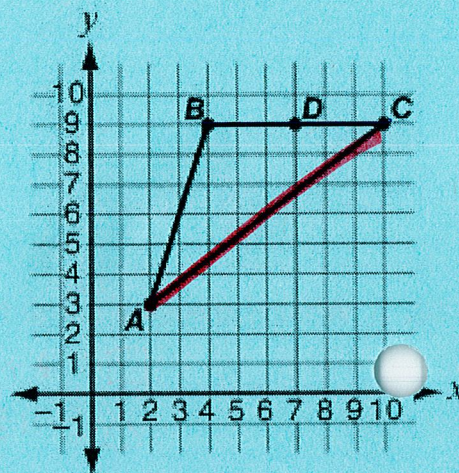
$$y = 3x + 5 \quad (-3, 4) \quad y = -\frac{1}{3}x + 3$$



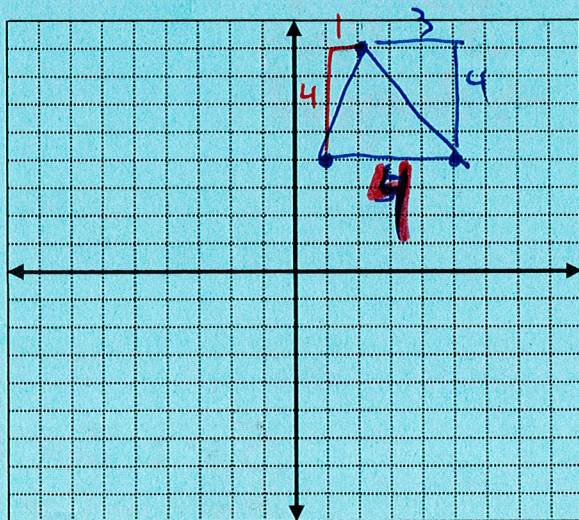
17. Given:  $\triangle ABC$  is shown on this grid. D is the midpoint of BC.

What is the midpoint of AC? Show all work for credit.

$$\begin{aligned} A & (2, 3) \\ C & (10, 9) \\ & \frac{12}{2}, \frac{12}{2} \\ & (6, 6) \end{aligned}$$



18. In a triangle with coordinates (1, 4), (2, 8), and (5, 4), **what would be the perimeter rounded to the nearest tenth (1 decimal place)?** A blank graph is provided if needed.



$$\begin{aligned} & 5 \\ \sqrt{1^2 + 4^2} & = 4.1 \\ \sqrt{3^2 + 4^2} & = 5 \\ \hline & 13.1 \end{aligned}$$