

Chapter 8: Geometry

Name: _____

Find the value of each pronumeral in the diagrams below.

Choose and write down an appropriate reason for your answer from this list:

A: vertically opposite angles

B: angles on a straight line

C: revolution equals 360°

D: sum of adjacent angles

E: adjacent complementary angles

F: alternate angles on parallel lines

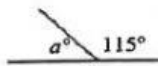
G: corresponding angles on parallel lines

H: cointerior angles on parallel lines

I: angle sum of a triangle equals 180°

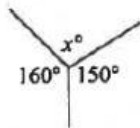
J: angle sum of a quadrilateral equals 360°

1



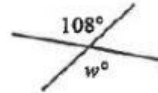
$$a = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

2



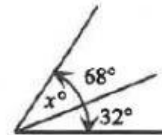
$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

3



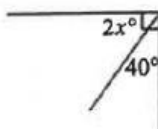
$$w = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

4



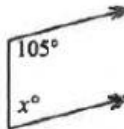
$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

5



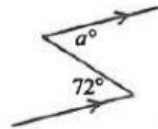
$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

6



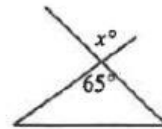
$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

7



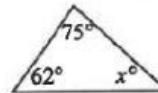
$$a = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

8



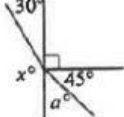
$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

9



$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

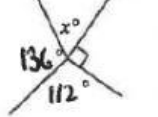
10



$$a = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

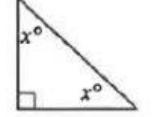
$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

11



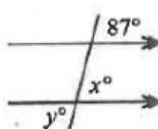
$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

12



$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

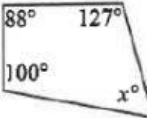
13



$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

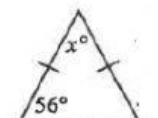
$$y = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

14



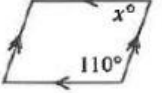
$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

15



$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$

16



$$x = \underline{\hspace{2cm}} \quad (\hspace{1cm})$$