

Definitions:

Point

Line

Collinear

Plane

Coplanar

Ray

Line segment

Acute angle

Obtuse Angle

Right Angle

Straight angle

Complimentary angles

Supplementary angles

Linear Pair

Congruent

Vertical angles

Midpoint

Angle bisector

Segment bisector

Protractor

Be able to name something that represents the following:

Point _____ line _____ plane _____

Two lines intersect at a _____

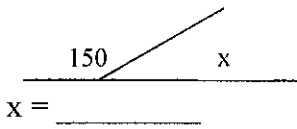
Two planes intersect at a _____

A line and a plane intersect at a _____

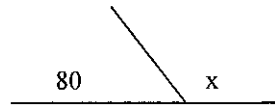
How many points determine a line? _____

How many points determine a plane? _____

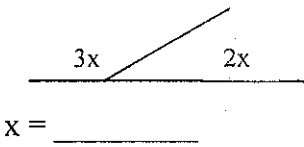
1.



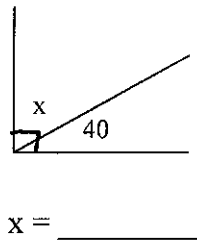
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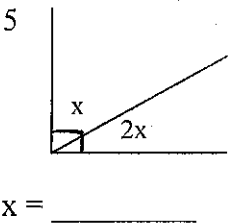
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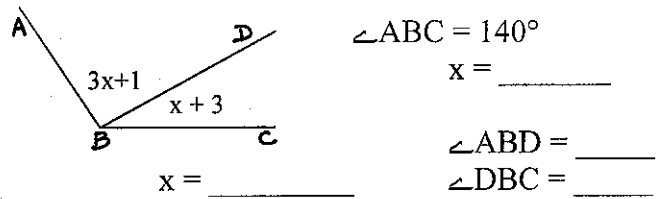
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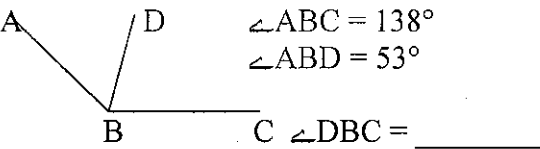
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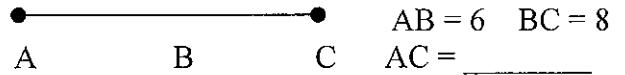
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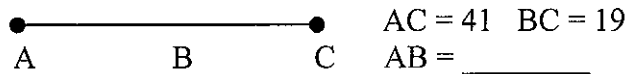
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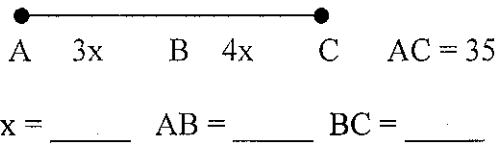
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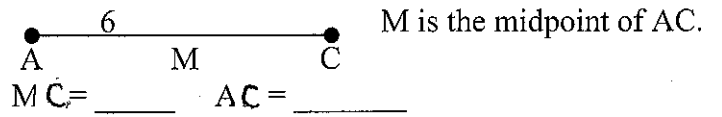
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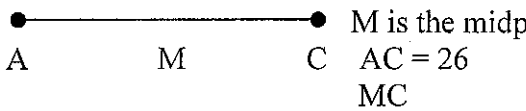
10.



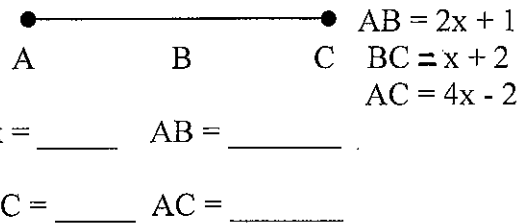
11.



12.



13.



Is B the midpoint of AC? _____

Chapter 2

An if-then statement is called a _____.

The 'if' part is called the _____.

Something that proves a statement false is called a _____.

Interchanging the 'if' and 'then' information creates a _____.

Underline the hypothesis one and the conclusion twice.

1. If Mrs. Foeller is in a good mood, then she will not yell!
2. Mrs. Foeller does not yell if students work hard and stay in their seats.

Tell if the original conditional and the converse are **True or False**.

1. _____ If $x > 3$ then $x > 7$.
2. _____ If $m\angle A = 12^\circ$ then the angle is acute.
3. _____ If Oprah lives in Chicago then she lives in Illinois.
4. _____ If a figure has four sides it is a square.
5. _____ If an angle measures 90° then it is a right angle.
6. _____ If $x^2 = 16$, then $x = 4$.
7. _____ If I get an 80% average, then I have a C.
8. _____ If a number ends in 2 then it is divisible by 2.

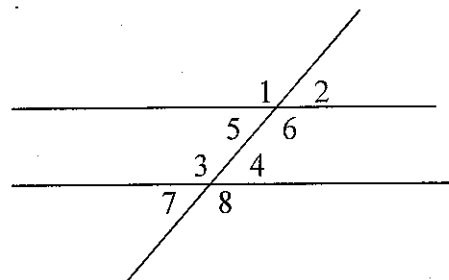
Distance. Find the distance between

1. -18 and 34 on the number line. _____
2. -87 and -23 on the number line. _____
3. 25 and -7 on the number line. _____

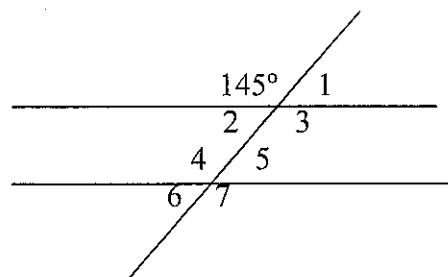
Parallel Lines

Refer to the diagram at the right to answer the following:

1. Name a pair of alternate interior angles. _____
2. Name a pair of alternate exterior angles. _____
3. Name a pair of corresponding angles. _____
4. Name a set of same side interior angles. _____

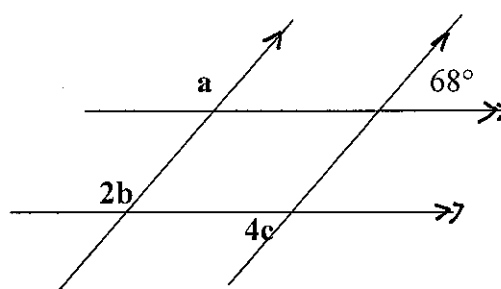


1 = _____ 2 = _____
 3 = _____ 4 = _____
 5 = _____ 6 = _____
 7 = _____



Refer to the diagram at the right.

a = _____ b = _____ c = _____



Quadrilaterals

Quadrilaterals with one pair of parallel sides are called _____.

Quadrilaterals with two pairs of parallel sides are called _____.

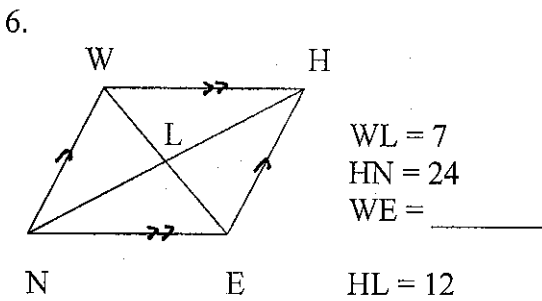
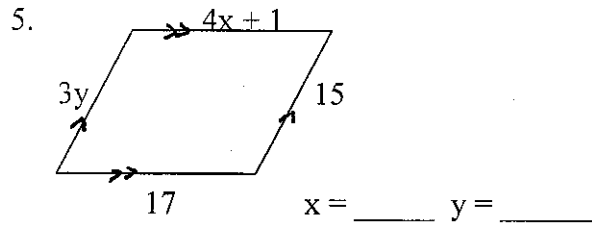
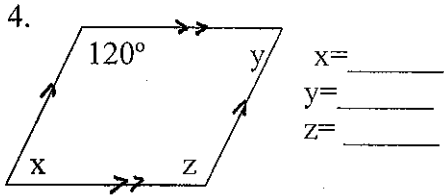
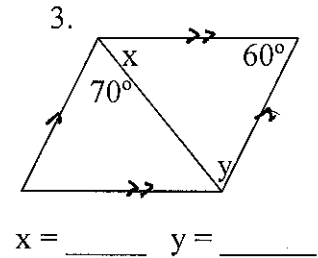
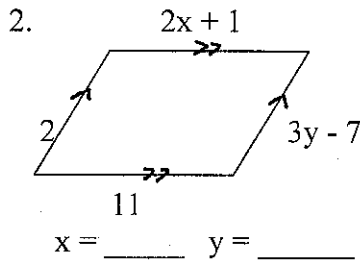
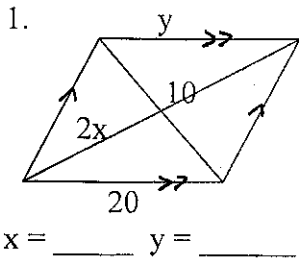
Name 5 properties of a parallelogram.

What additional properties do the following have?

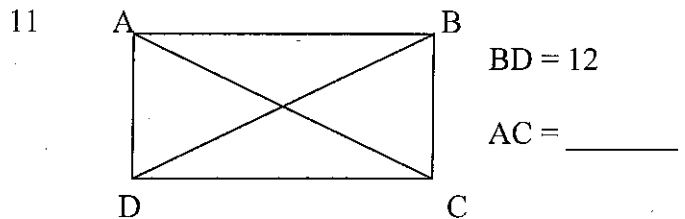
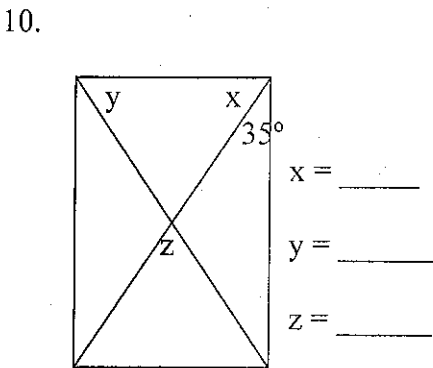
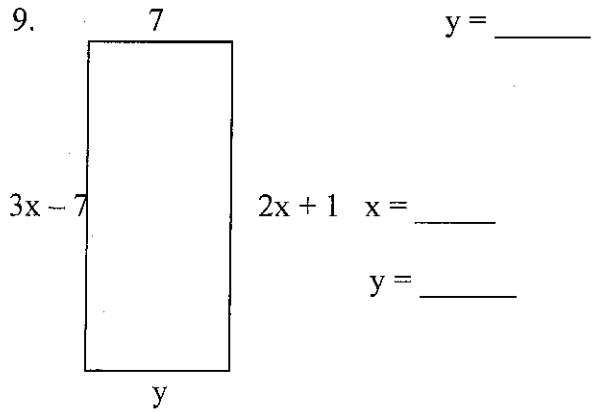
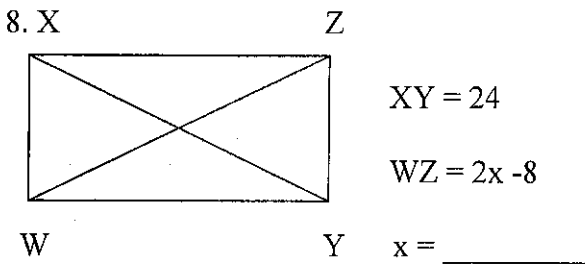
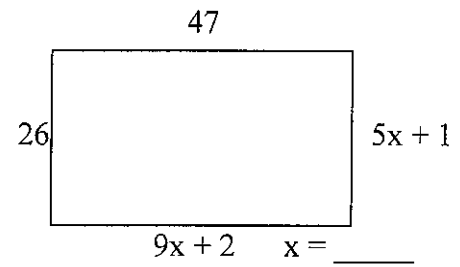
Rectangle

Rhombus

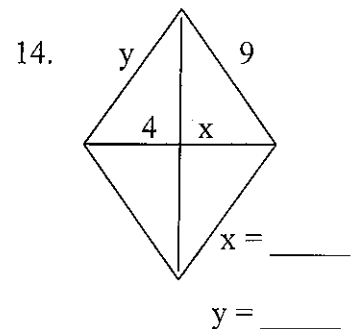
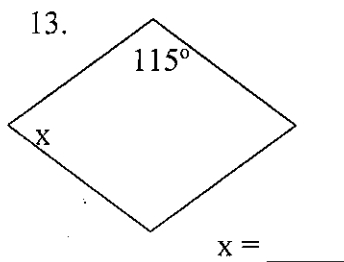
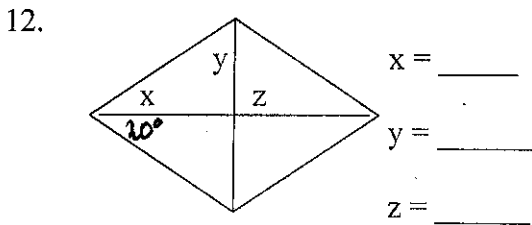
Square



RECTANGLES 7.

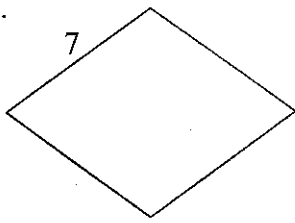


RHOMBI



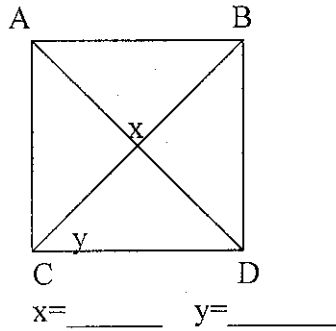
SQUARES

15.

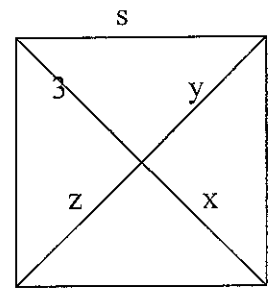


Perimeter = _____

16.



17. Perimeter = 64 $s = \underline{\hspace{2cm}}$

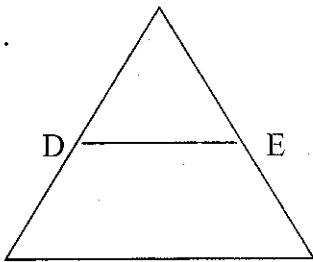


$x = \underline{\hspace{2cm}}$ $y = \underline{\hspace{2cm}}$

$z = \underline{\hspace{2cm}}$

Midsegments of triangles and trapezoids. Triangles are half or double. Trapezoids are an average of the top and bottom.

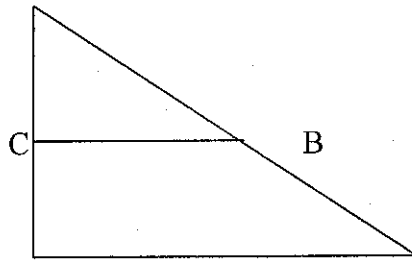
1.



84

$DE = \underline{\hspace{2cm}}$

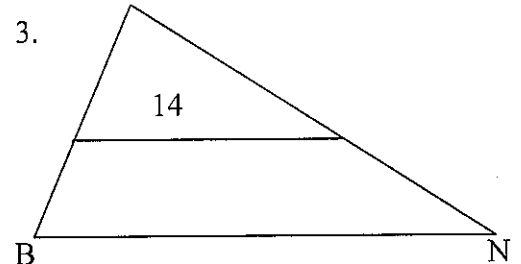
2.



128

$CB = \underline{\hspace{2cm}}$

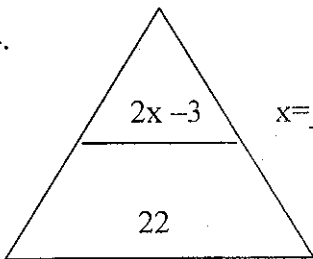
3.



14

$BN = \underline{\hspace{2cm}}$

4.

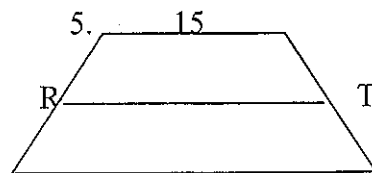


$2x - 3$

22

$x = \underline{\hspace{2cm}}$

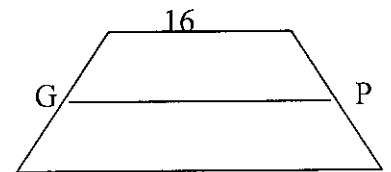
5.



21

$RT = \underline{\hspace{2cm}}$

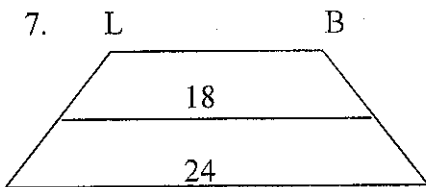
6.



26

$GP = \underline{\hspace{2cm}}$

7.



18

24

$LB = \underline{\hspace{2cm}}$

Polygon Names Give the name of the figure.

3 sides _____

4 sides _____

5 sides _____

6 sides _____

7 sides _____

8 sides _____

9 sides _____

10 sides _____

12 sides _____

Polygon Formulas*These formulas will be on a cheat sheet!!!**

*Sum of interior angles = $(n-2) 180^\circ$

*Each interior angle = $\frac{(n-2)180^\circ}{n}$

*Sum of exterior angles = 360°

*Each exterior angle = $\frac{360^\circ}{n}$

*number of sides = $\frac{360^\circ}{\text{exterior } \angle}$

*Each int \angle + each ext \angle = 180°

Polygon Angles

- _____ 1. Find the sum of the interior angles of a hexagon.
- _____ 2. Find the sum of the interior angles of an octagon.
- _____ 3. Find the sum of the exterior angles of a pentagon.
- _____ 4. Find the sum of the exterior angles of an 11-gon.
- _____ 5. Find each interior angle of a pentagon.
- _____ 6. Find each interior angle of a octagon.
- _____ 7. Find the interior angle if the exterior angle is 18°
- _____ 8. Find each exterior angle of a do-decagon.
- _____ 9. Fin each exterior angle of a hexagon.
- _____ 10. Find the number of sides if each exterior angle is 45° .
- _____ 11. Find the number of sides if each exterior angle is 12° .
- _____ 12. Find the number of sides if each INTERIOR angle is 150° .
- _____ 13. Three angles of a quadrilateral are 46° , 88° , and 121° . Find the 4th angle.

- _____ 14. Four angles of a pentagon are 137° , 114° , 91° , and 127° . Find the 5th angle.
- _____ 15. Five angles of a hexagon are 68° , 88° , 121° , 145° and 136° . Find the 6th angle.
- _____ 16. Seven angles of an octagon are 143° , 159° , 161° , 130° , 148° , 98° , and 117° . Find the 8th.

Define:

Parallel Lines _____

Perpendicular Lines _____

Parallel lines have _____ slope

Perpendicular lines have _____ slope.

Vertical lines have _____ slope

Horizontal lines have _____ slope.

$$m = \frac{y_2 - y_1}{x_2 - x_1} \text{ **** This formula will be on a cheat sheet!!!}$$

Remember the difference between 0 on the top and 0 on the bottom!!

1. Find the slope between (-12, 5) and (10,1) _____
2. Find the slope between (0,16) and (8,2) _____
3. Find the slope between (-1, 17) and (3,5) _____
4. Find the slope between (-11, 0) and (-1,-8) _____
5. Find the slope between (3,11) and (3,-6) _____
6. Find the slope between (-5,-7) and (-1,-3) _____
7. Find the slope between (-9,-2) and (15,-2) _____

$$\text{midpoint} = \left(\frac{x_2 + x_1}{2}, \frac{y_2 + y_1}{2} \right) \text{ **** This formula will be on a cheat sheet!!!}$$

Find the midpoints for each of the points above.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____

Simplify each radical. Circle your answer.

1. $\sqrt{25}$

2. $\sqrt{98}$

3. $\sqrt{225}$

4. $\sqrt{400}$

5. $\sqrt{100}$

6. $\sqrt{450}$

7. $\sqrt{200}$

8. $\sqrt{162}$

9. $\sqrt{27}$

10. $\sqrt{288}$

11. $\sqrt{48}$

12. $\sqrt{132}$

13. $\sqrt{150}$

14. $\sqrt{72}$

15. $\sqrt{80}$

Find the distance between the points. Circle your answer

1. $(-3, 7)(2, -8)$

2. $(1, -9)(3, 5)$

3. $(-2, 8)(4, -9)$

4. $(11, 7)(5, -1)$

5. $(0, 0)(15, -25)$

6. $(-8, 6)(1, -12)$