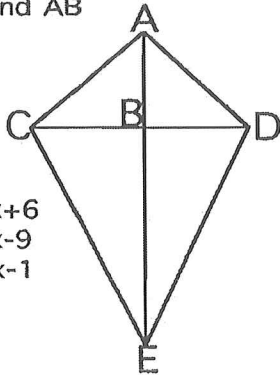


Name: _____ **Kites and Trapezoids Worksheet**

Chap: Quads

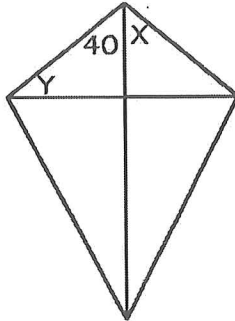
Assign: 31c

1.) Given Kite ADEC
Find AB

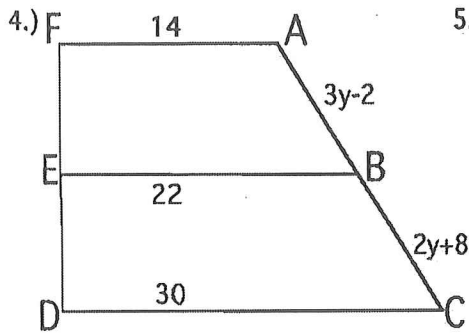
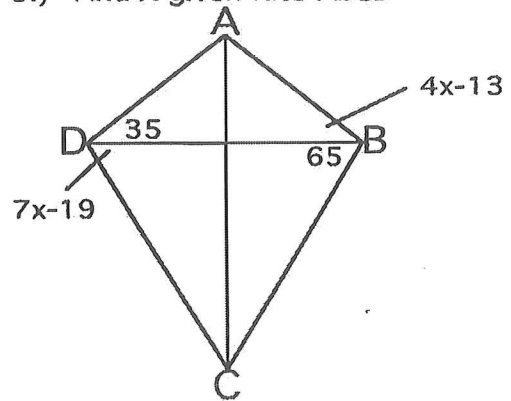


$CB = 3x + 6$
 $BD = 8x - 9$
 $AB = 7x - 1$

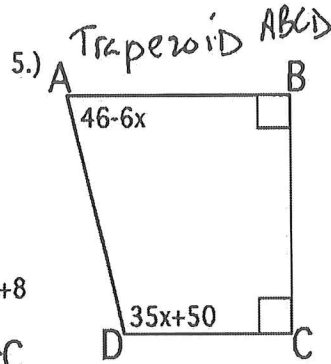
2.) Given Kite ABCD
Find X and Y



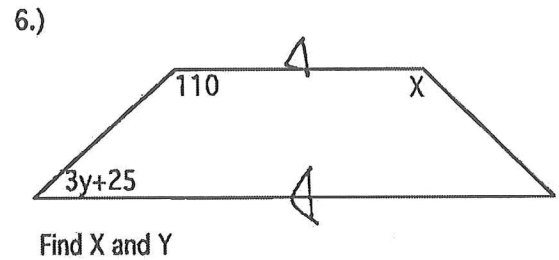
3.) Find X given Kite ABCD



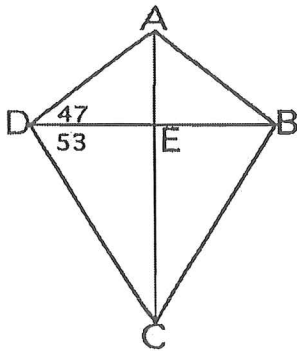
Find AB



Find $m\angle D =$

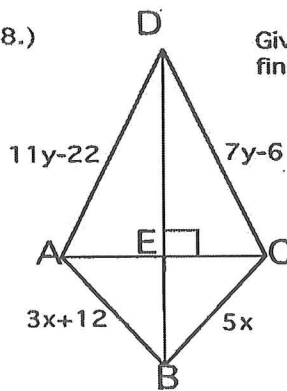


7.) Given Kite ABCD



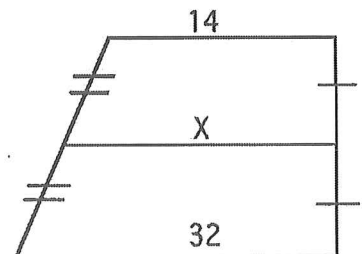
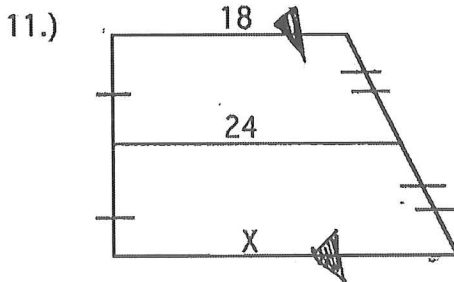
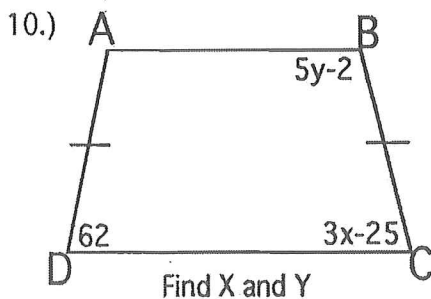
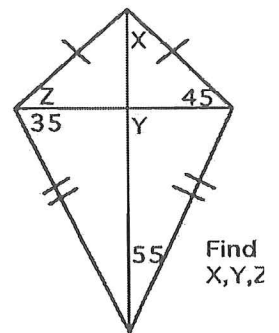
Find $m\angle ABC$
 $m\angle CED$
 $m\angle CEB$

8.)



Given Kite DCBA
find AD and CB

9.)



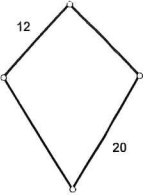
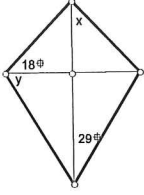
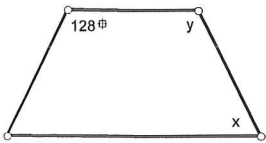
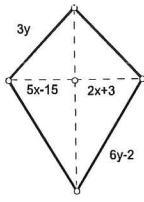
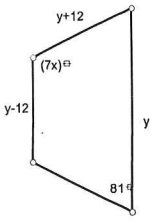
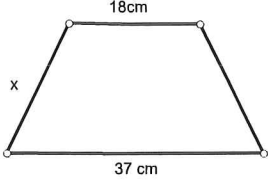
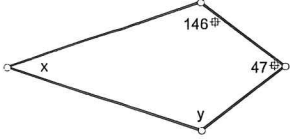
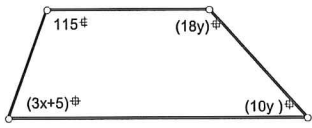
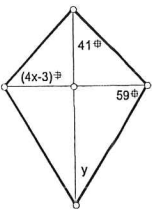
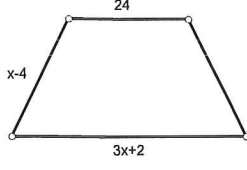
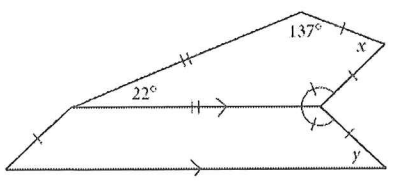
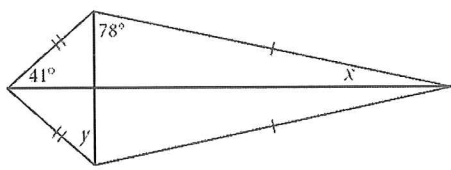
Geometry Worksheet

Kites and Trapezoids

Name: _____

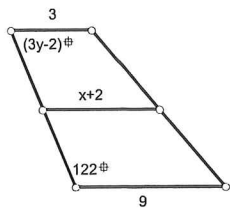
Period: _____

I. Kites and Trapezoids: Solve.

<p>1. Kite</p>  <p>Perimeter =</p>	<p>2. Kite</p>  <p>$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$</p>
<p>3. Isosceles Trapezoid</p>  <p>$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$</p>	<p>4. Kite's Perimeter=86 ft</p>  <p>$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$</p>
<p>5. Isosceles Trapezoid's Perimeter=164 cm</p>  <p>$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$</p>	<p>6. Isosceles Trapezoid's Perimeter=85 cm</p>  <p>$x = \underline{\hspace{2cm}}$</p>
<p>7. Kite</p>  <p>$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$</p>	<p>8. Trapezoid</p>  <p>$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$</p>
<p>9. Kite</p>  <p>$x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$</p>	<p>10. Isosceles Trapezoid's Perimeter=88 ft</p>  <p>$x = \underline{\hspace{2cm}}$</p>
<p>11. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$</p> 	<p>12. $x = \underline{\hspace{2cm}}, y = \underline{\hspace{2cm}}$</p> 

II. Midsegment of Trapezoids. Show your work.

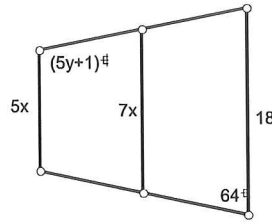
13. Trapezoid with Midsegment



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

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

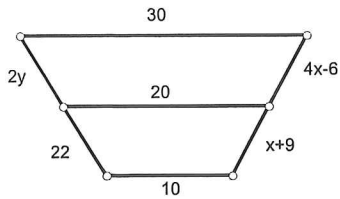
14. ISOSCELES TRAPEZOID with Midsegment



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

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

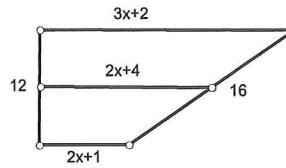
15. 10. Trapezoid with Midsegment



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

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

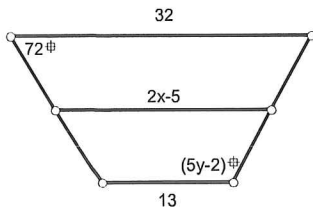
16. Trapezoid with Midsegment



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

$$\text{Perimeter} = \underline{\hspace{2cm}}$$

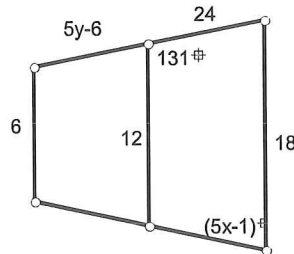
17. Isosceles Trapezoid with Midsegment



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

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

18. Isosceles Trapezoid with Midsegment



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

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

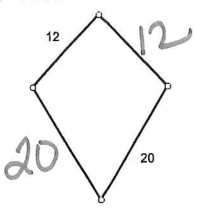
Geometry Worksheet

Kites and Trapezoids

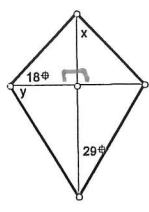
Name: Key
 Period: _____

I. Kites and Trapezoids: Solve.

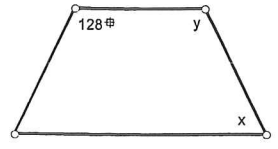
1. Kite Perimeter = 64



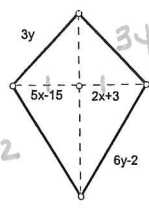
2. Kite x = 72°, y = 61°



3. Isosceles Trapezoid x = 52°, y = 128°

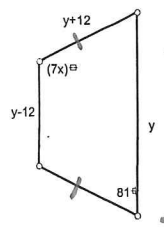


4. Kite's Perimeter=86 ft x = 6, y = 5



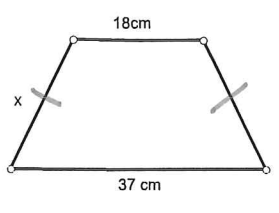
$2(6y-2) + 2(3y) = 86$
 $12y - 4 + 6y = 86$
 $18y - 4 = 86$
 $18y = 90$
 $y = 5$
 $5x - 15 = 2x + 3$
 $3x = 18$
 $x = 6$

5. Isosceles Trapezoid's Perimeter=164 cm x = 14.14°, y = 38 cm

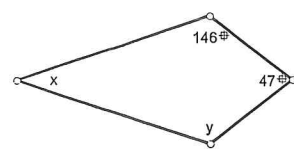


$y+12 + y+12 + y-12 + y-12 = 164$
 $4y + 12 = 164$
 $4y = 152$
 $y = 38$
 $7x = 99$

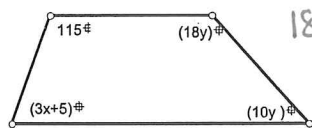
6. Isosceles Trapezoid's Perimeter=85 cm x = 15



7. Kite x = 21°, y = 146°

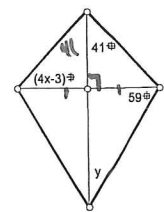


8. Trapezoid x = 20, y = 45/7



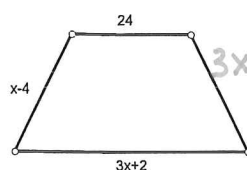
$18y + 10y = 180$
 $y = \frac{45}{7} \approx 6.43$
 $18 + 3x + 5 = 180$
 $3x = 160$
 $x = 20$

9. Kite x = 13, y = 31°



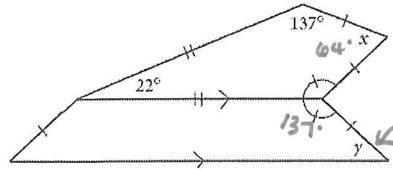
$41 + 90 + 4x - 3 = 180$
 $4x = 52$
 $x = 13$

10. Isosceles Trapezoid's Perimeter=88 ft x = 14



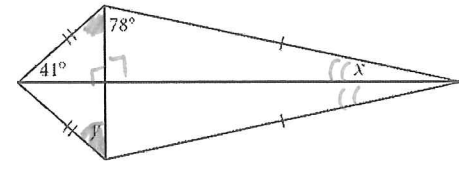
$3x+2 + 24 + x-4 + x-4 = 88$
 $5x + 18 = 88$
 $5x = 70$
 $x = 14$

11. x = 64°, y = 43



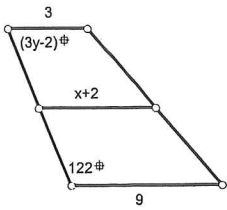
$137 + y = 180$
 $y = 43$

12. x = 12, y = 49



II. Midsegment of Trapezoids. Show your work.

13. Trapezoid with Midsegment

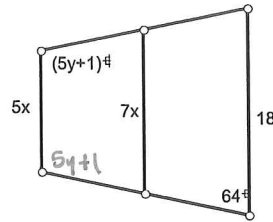


$$x = \frac{4}{y} = \frac{20}{}$$

$$x+2 = \frac{1}{2}(9+3)$$

$$3y - 2 + 122 = 180$$

14. ISOSCELES TRAPEZOID with Midsegment

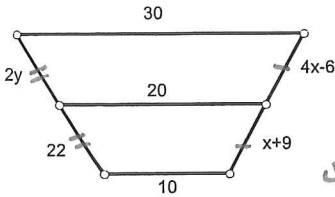


$$x = \frac{2}{y} = \frac{23}{}$$

$$7x = \frac{1}{2}(5x+18)$$

$$5y + 1 + 64 = 180$$

15. 10. Trapezoid with Midsegment

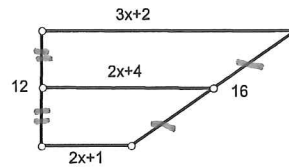


$$x = \frac{5}{y} = \frac{11}{}$$

$$4x - 6 = x + 9$$

$$2y = 22$$

16. Trapezoid with Midsegment



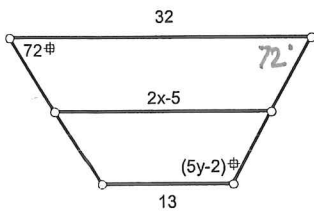
$$x = \frac{5}{\text{Perimeter}} = \frac{56}{}$$

$$2x + 4 = \frac{1}{2}(2x + 1 + 3x + 2)$$

$$4x + 8 = 5x + 3$$

$$x = 5$$

17. Isosceles Trapezoid with Midsegment



$$x = \frac{13.75}{y} = \frac{22}{}$$

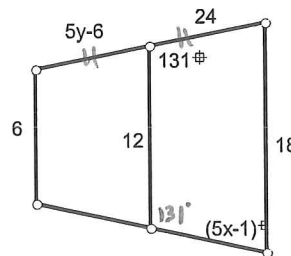
$$2x - 5 = \frac{1}{2}(32 + 13)$$

$$4x - 10 = 45$$

$$x = 13.75$$

$$72 + 5y - 2 = 180$$

18. Isosceles Trapezoid with Midsegment



$$x = \frac{10}{y} = \frac{6}{}$$

$$5y - 6 = 24$$

$$131 + 5x - 1 = 180$$

Name: Key

Kites and Trapezoids Worksheet

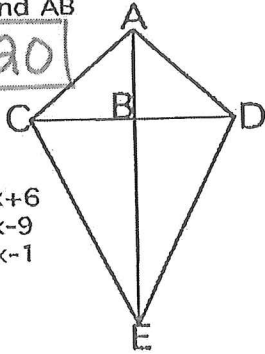
Chap: Quads

Assign: 31c

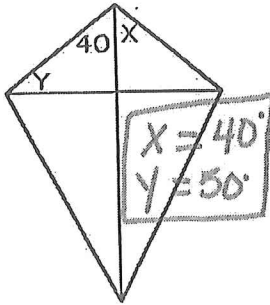
1.) Given Kite ADEC
Find AB

$AB = 20$

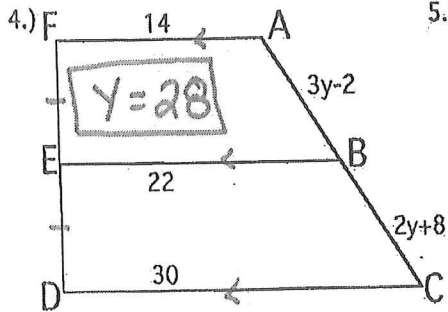
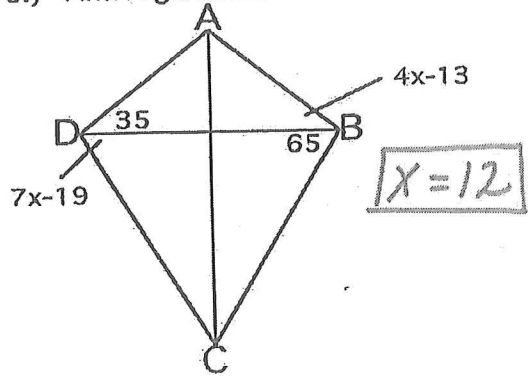
$CB = 3x + 6$
 $BD = 8x - 9$
 $AB = 7x - 1$



2.) Given Kite ABCD
Find X and Y

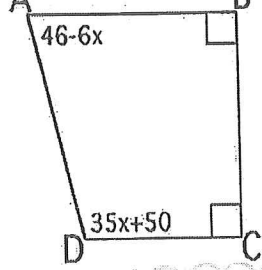


3.) Find X given Kite ABCD

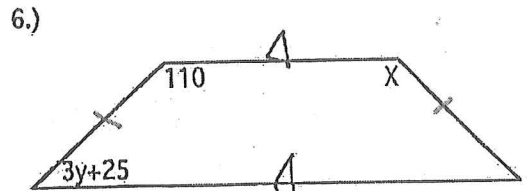


Find AB

5.) Trapezoid ABCD



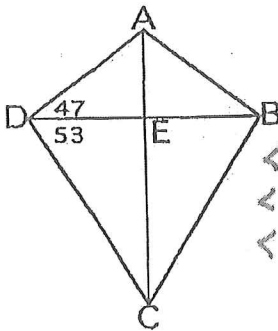
Find $m\angle D = 151.4^\circ$



Find X and Y

$X = 110$
 $Y = 15$

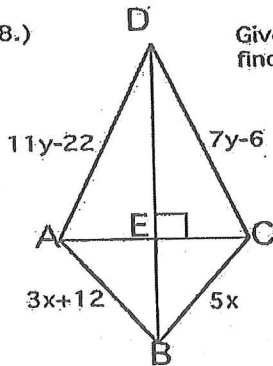
7.) Given Kite ABCD



Find $m\angle ABC$
 $m\angle CED$
 $m\angle CEB$

$\angle ABC = 100^\circ$
 $\angle CED = 90^\circ$
 $\angle CEB = 90^\circ$

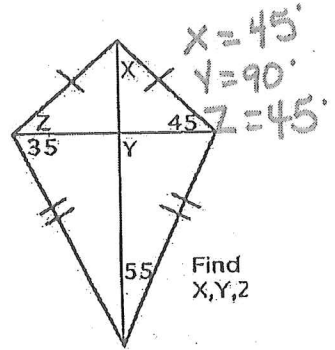
8.)



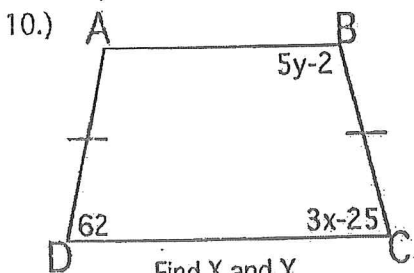
Given Kite DCBA
find AD and CB

$X = 6$
 $Y = 4$

9.)



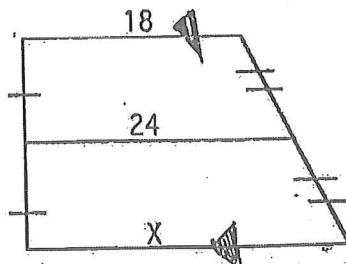
Find X, Y, Z



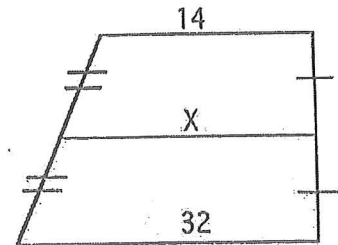
Find X and Y

$X = 29$
 $Y = 24$

11.)



$X = 30$



$X = 23$