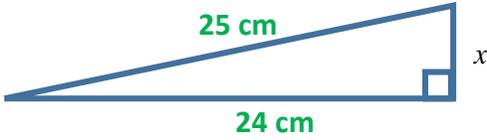
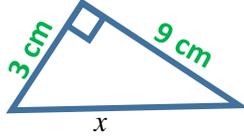
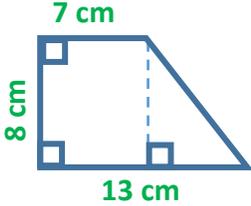
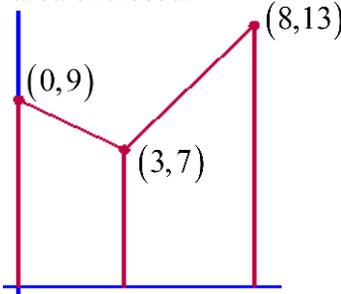
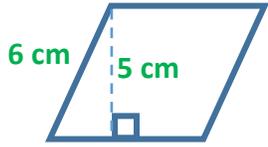


Topics on Test:

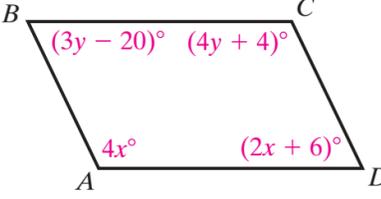
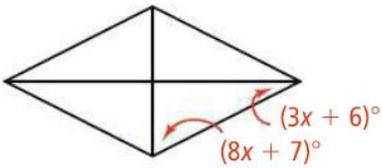
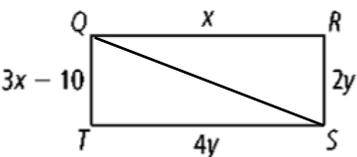
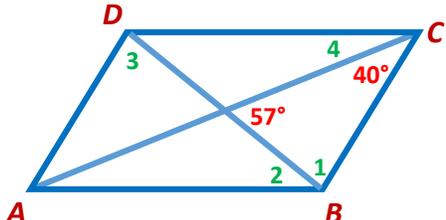
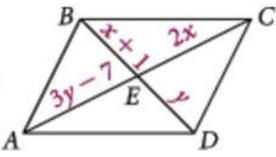
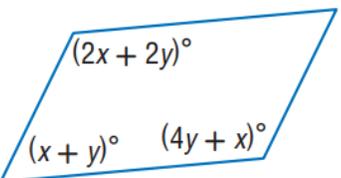
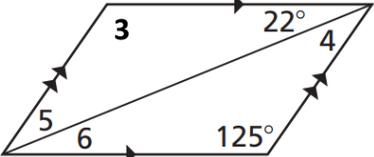
- Pythagorean Theorem
- Area and Perimeter of triangles and quadrilaterals
- Properties of Parallelograms (including Rhombuses, Rectangles, and Squares)
- Properties of other Quadrilaterals (Trapezoids, Isosceles Trapezoids, and Kites)
- Properties of Exponents

Page of notes allowed.  
Handwritten by you. May contain all formulas and properties. No examples.

**Pythagorean Theorem & Area and Perimeter**

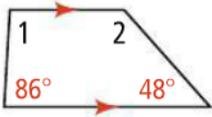
<p>1) Find the value of <math>x</math> and the area and perimeter of the triangle.</p> 	<p>2) Find the value of <math>x</math>. Leave your answer in simple radical form.</p> 	<p>3) Find the area and perimeter of the rectangle.</p> 
<p>4) Find the area and perimeter.</p> 	<p>5) Find the area enclosed.</p> 	<p>6) Find the area and perimeter of the rhombus.</p> 

**Properties of Parallelograms (including Rhombuses, Rectangles and Squares):**

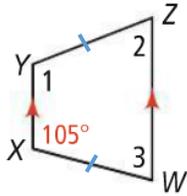
<p>7) In <math>\square LMNP</math>, the ratio of <math>LM</math> to <math>MN</math> is 5:9. Find <math>LM</math> and <math>MN</math> if the perimeter of <math>\square LMNP</math> is 140 cm.</p> 	<p>8) <math>ABCD</math> is a parallelogram. Find the value of <math>x</math> and <math>y</math> and the measure of each angle.</p> 	<p>9) The figure is a rhombus. Find the value of <math>x</math>.</p> 
<p>10) <math>QRST</math> is a rectangle. a) Find the value of <math>x</math> and <math>y</math>. b) Find the length of <math>\overline{QS}</math>.</p> 	<p>11) <math>ABCD</math> is a parallelogram. <math>m\angle ABC = 120^\circ</math></p> 	<p>12) <math>ABCD</math> is a parallelogram. Find the value <math>x</math> and <math>y</math>.</p> 
<p>13) The figure is a parallelogram. Find <math>x</math> and <math>y</math>.</p> 	<p>14) Find the measure of each numbered angle.</p> 	<p>15) What names can be used to describe the quadrilateral formed by <math>(-1, 2)</math>, <math>(3, 4)</math>, <math>(5, 8)</math>, <math>(1, 6)</math>.</p>

## Trapezoids and Kites

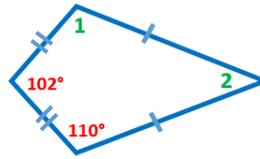
16) Find the measure of each numbered angle.



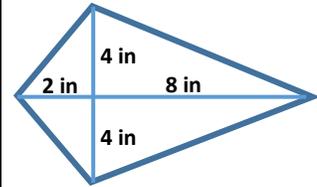
17) Find the measure of each numbered angle.



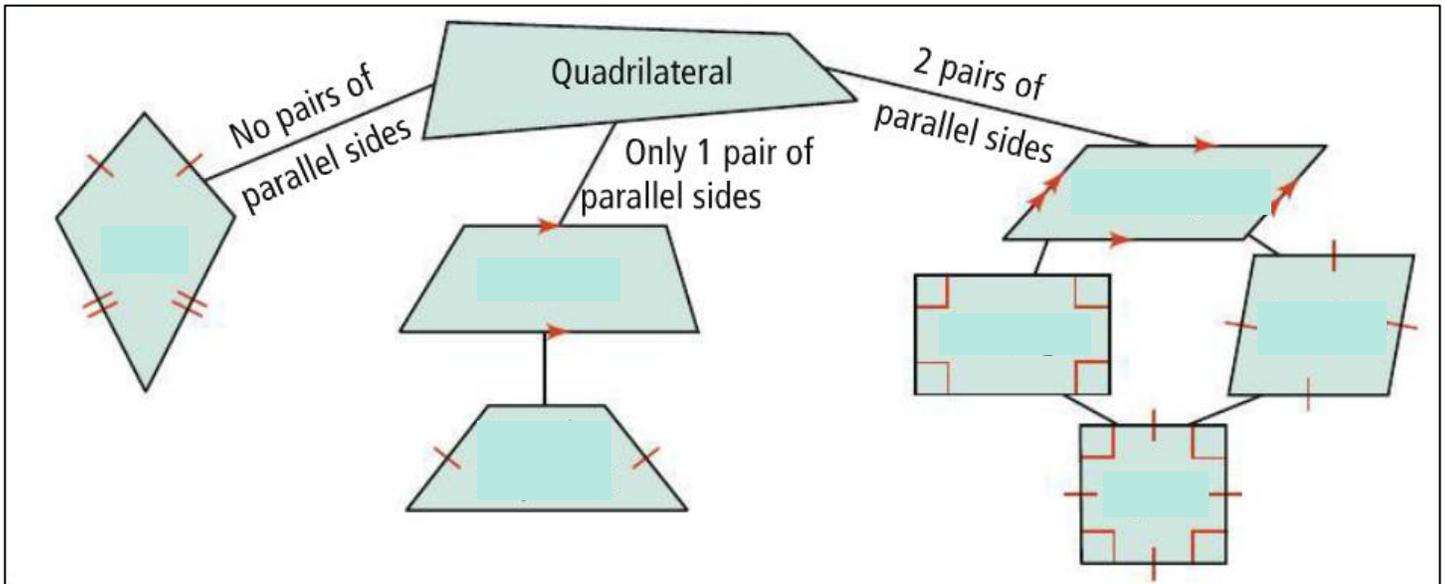
18) Find the measure of each numbered angle.



19) Find the area of the kite. Optional challenge: Find the perimeter.



20) Fill in the name of each shape in the tree diagram. Try not to look at your notes.



21) **Properties of Exponents:** Simplify each expression.

a) $5^3$	b) $6^{-2}$	c) $3^0$	d) $\frac{1}{5^{-2}}$	e) $c^{-2}d$	f) $\frac{x^5}{y^{-3}}$	g) $\frac{4m^{-2}}{n^3 p^{-4}}$	h) $\frac{a^{-3}}{3a^4}$
i) $x^5 \cdot x^3$	j) $(x^3)^5$	k) $\frac{x^3}{x^5}$	l) $\frac{x^5}{x^3}$	m) $(4x^5)(3x^9)$	n) $(3x^5)^3$		
o) $(7a^8b^2)(5a^5b^8)$	p) $\frac{12x^5y^4}{9xy^6}$	q) $\frac{2ab^3}{4a^6b^3}$	r) $\frac{a^{-2}b^5}{a^5b^{-1}}$				