

## Midterm Review II

### Always, Sometimes, Never

- 1.) Noncoplanar lines are skew
- 2.) Skew lines intersect
- 3.) 2 obtuse angles are complementary
- 4.) 2 right angles are congruent
- 5.) CPCTC proves two triangles congruent
- 6.) The exterior angles of a polygon add up to 360 degrees
- 7.) 4 points are coplanar
- 8.) The acute angles of a right triangle are complementary
- 9.) 2 triangles are congruent by SSA
- 10.) Same side interior angles on parallel lines are congruent.

### Multiple Choice:

- 11.) Which of these is also a rhombus?  
a.) rectangle                      b.) square                      c.) parallelogram                      d.) pentagon
- 12.) On a trapezoid, which of these can never be congruent?  
a.) bases                      b.) legs                      c.) base angles                      d.) diagonals
- 13.) Which of these will not prove two triangles congruent?  
a.) ASA                      b.) HL                      c.) SSS                      d.) AA
- 14.) If the vertex of an isosceles triangle is 70 degrees, what is the measure of a base angle?  
a.) 70 degrees                      b.) 140 degrees                      c.) 55 degrees                      d.) 110 degrees
- 15.) What is the measure of each interior angle of a regular hexagon?  
a.) 36 degrees                      b.) 120 degrees                      c.) 60 degrees                      d.) 720 degrees
- 16.) In triangle RAT,  $m\angle A = 50$  degrees and  $m\angle T$  is 70 degrees. What is the longest side of this triangle?  
a.) RA                      b.) AT                      c.) RT                      d.) Not enough information
- 17.) The supplement of an angle is 10 more than three times the complement. What is the measure of the angle?  
a.) 50 degrees                      b.) 130 degrees                      c.) 40 degrees                      d.) 30 degrees
- 18.) If one obtuse angle of a parallelogram is 98 degrees, what is the measure of an acute angle of the parallelogram?  
a.) 98 degrees                      b.) 112 degrees                      c.) 72 degrees                      d.) 82 degrees
- 19.) If the bases of a trapezoid are 18 and 36, what is the length of the median?  
a.) 54                      b.) 18                      c.) 27                      d.) 12
- 20.) Which of these traits are always found in a rhombus but not always in a rectangle?  
a.) congruent diagonals                      b.) perpendicular diagonals  
c.) congruent opposite sides                      d.) congruent diagonals

21.) If the sides of a triangle are 14, 23, and  $x$ , then:

a.)  $8 < x < 36$

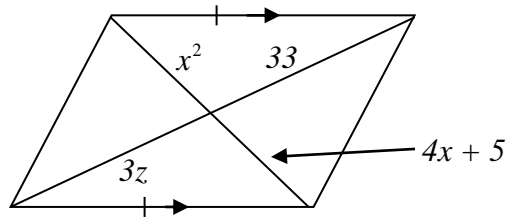
b.)  $37 < x < 9$

c.)  $10 < x < 36$

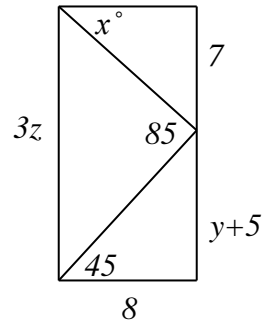
d.)  $9 < x < 37$

**Numerical Problems:**

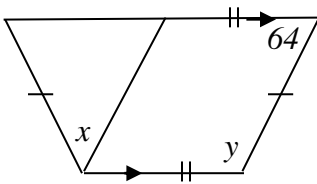
22.) Find  $x$  and  $z$ .



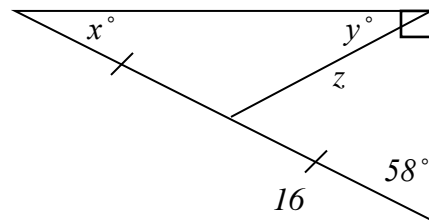
23.) For this rectangle find  $x$ ,  $y$ , and  $z$



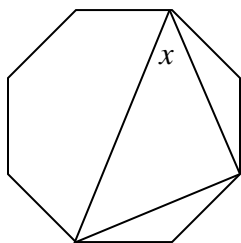
24.) Find  $x$  and  $y$ :



25.) Find  $x$ ,  $y$  and  $z$

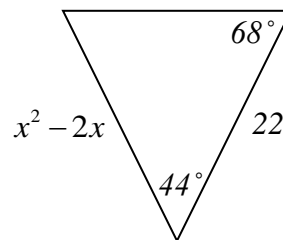


26.)



this octagon is regular

27.)



28.) This is a trapezoid with a median shown. Find  $x$ :

