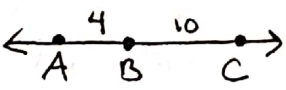
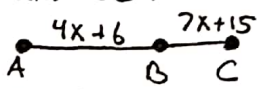
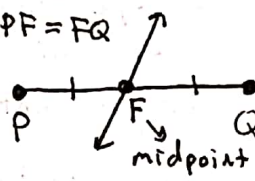
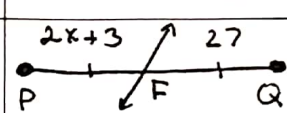
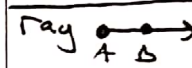
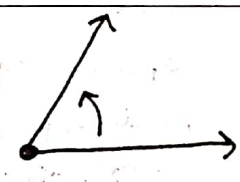
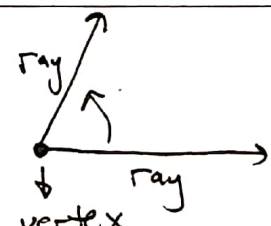
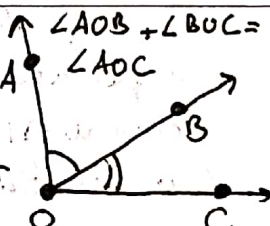
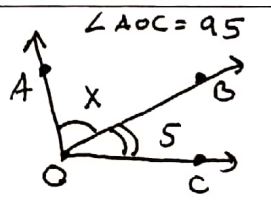
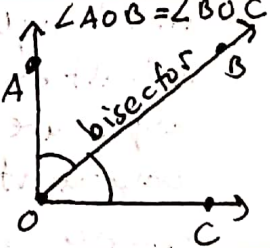
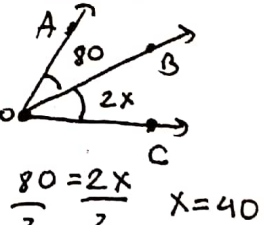
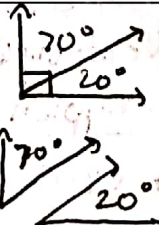
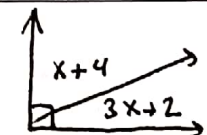


Integrated Math II: Proving Geometric Relationships Guided Notes/Vocabulary

	definitions	diagram	problem	
Postulate/Axiom Theorem	postulate/Axiom: + truth without formal proof. (obviously true)	Theorem: truth given by postulate and/or axioms to prove its true.	example: If two lines intersect, then opposite angles are congruent.	If-then: conditional statement.
Segment Addition Postulate	If 3 points A, B, C are <u>collinear</u> and B is between A & C, then $AB + BC = AC$	 $AB + BC = AC$ $4 + 10 = 14$	AC = 120 find AB, and BC.  $(4x+6) + (7x+15) = 120$	<u>collinear</u> : many points on same line.
Segment Bisector	line, ray, or segment that cuts a segment into 2 equal parts	$PF = FQ$  midpoint	 $2x+3 = 27$ $2x = 24$ $x = 12$	$x = 9$ $AB = 4(9) + 6 = 42$ $BC = 7(9) + 15 = 69$ 
Angle/Vertex	amount of rotation between 2 rays from a common endpoint called the vertex			
Angle Addition Postulate	If point B lies inside $\angle AOC$, then $\angle AOB$ and $\angle BOC$ adds together to form $\angle AOC$	 $\angle AOB + \angle BOC = \angle AOC$	 $\angle AOC = 95$ $x = 90$	
Angle Bisector	Is a line or ray that divides an angle into two equal angles.	 $\angle AOB = \angle BOC$	 $\frac{80}{2} = \frac{2x}{2}$ $x = 40$	
Complementary Angles	2 angles that add together to equal 90° together or separate		 $x+4 + 3x+2 = 90$ $4x + 6 = 90$ $-6 \quad -6$ $\frac{4x}{4} = \frac{84}{4}$ $x = 21$	

Integrated Math II: Proving Geometric Relationships Guided Notes/Vocabulary

<p>Supplementary Angles</p>	<p>2 angles that add to 180°</p>		<p>$X = 140^\circ$</p>
<p>Adjacent Angles</p>	<p>2 angles that have a common vertex and a common side.</p>		<p>$\angle DAT = 100^\circ$</p> <p>$X = 70^\circ$</p>
<p>Linear Pair/Linear Pair Postulate</p>	<p>2 angles that share a line and are adjacent and supplementary.</p>		<p>$X = 60^\circ$</p>
<p>Vertical Angles/Vertical Angles Theorem</p>	<p>A pair of opposite angles made by 2 intersecting lines and are congruent.</p>		<p>$X - 5 = 30$ $X = 35^\circ$</p>
<p>Corresponding Angles/Corresponding Angles Postulate</p>	<p>corresponding angles are congruent (same location)</p>		<p>$X = 110$</p>
<p>Alternate Interior and Alternate Exterior Angles Theorems</p>	<p>alt int angles and alt ext. angles are congruent</p>		
<p>Same-Side Interior and Exterior Angles Theorems (Consecutive)</p>	<p>same side int. and ext angles are supplementary $+180^\circ$</p>		

two parallel lines are cut by another line called a transversal

