Name: _____ Date: _____

Foundations of Geometry Period: _____

Unknown Angles REVIEW

I. Vocabulary

A. Vertex, Sides, Angles

B. Acute, Right, Obtuse, Straight Angles

C. Supplementary angles add up to 180

D. Complementary angles add up to 90

E. Adjacent angles share a Side (Ray) and Vertex

F. Linear pairs add up to 180

G. Vertical Angles are =

H. Consecutive Adjacent Angles on a Line add to 180

I. Angles Around a Point add to 360

II. Name all sides, vertices, and angles. Be sure to name each angle four (4) different ways.

1.

Sides $\overline{AB}$, $\overline{BT}$, $\overline{TA}$

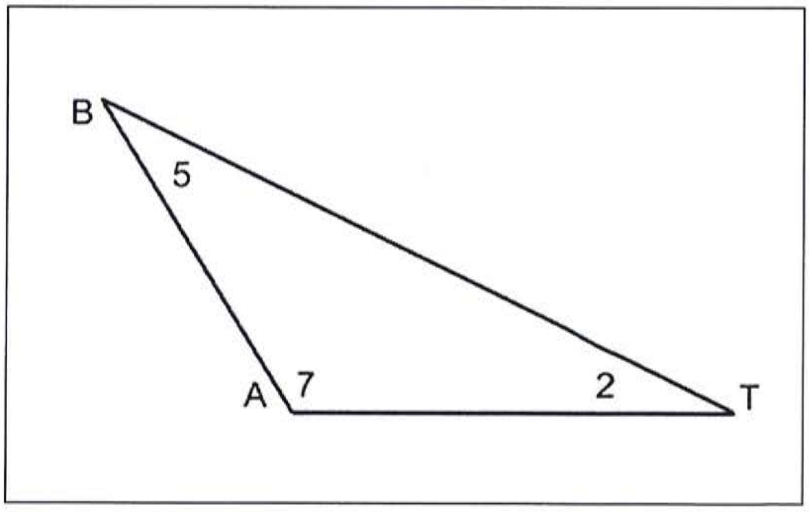
Vertices B, A, T

Angles

∠A, ∠7, ∠BAT, ∠TAB

∠B, ∠5, ∠ABT, ∠TBA

∠T, ∠2, ∠BTA, ∠ATB



III. Identify if the following angles are acute, straight, right, or obtuse

2. 127 Obtuse

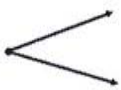
3. 90 Right

4. 179 Obtuse

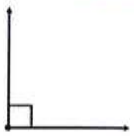
5. 81 Acute

6. 180 Straight

7. Straight

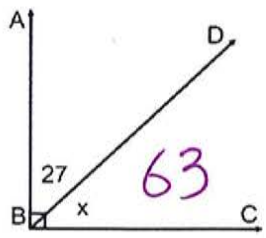
8.  Acute

9. Obtuse

10.  Right

IV. Solve for x the missing angles

11.



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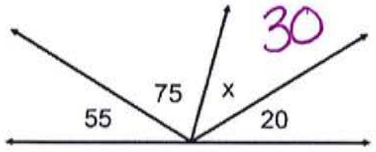

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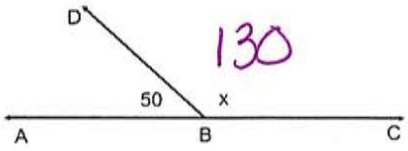

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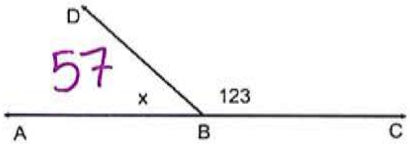

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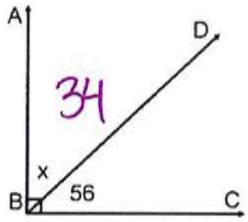

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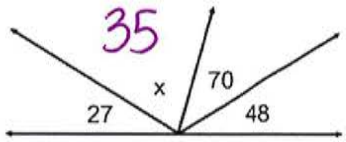

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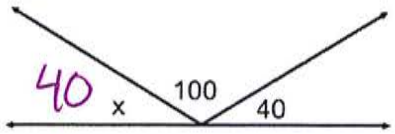

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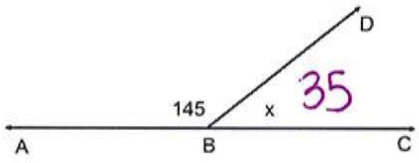

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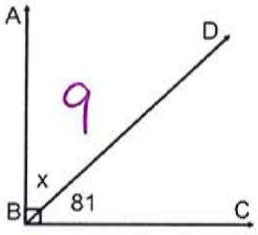

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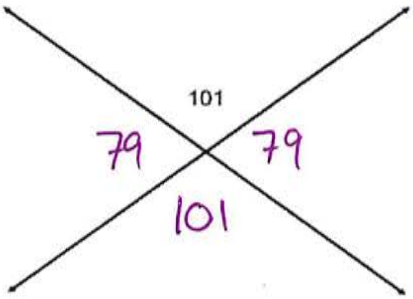

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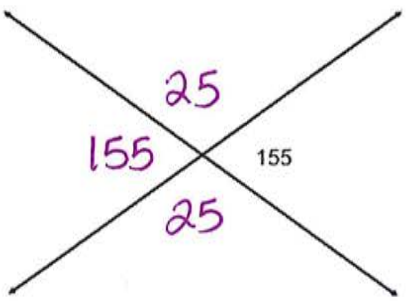

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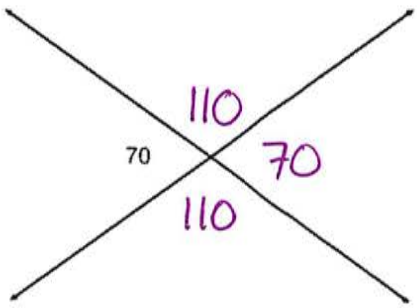


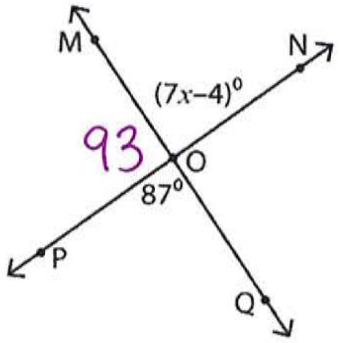
24. What is the complement of 42°? 48

25. What is the supplement of 111°? 69

25. What is the complement of 11°? 79

26. What is the supplement of 15°? 165

27. Solve for x and find $\angle MOP$

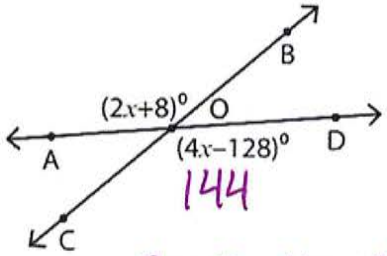


$87 = 7X-4$

$91 = 7X$

$X = 13$

28. Solve for x and find $\angle COD$

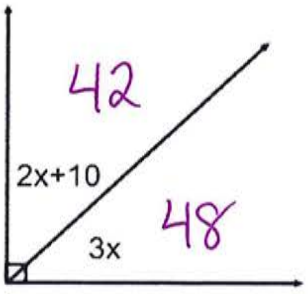


$2X+8 = 4X-128$

$136 = 2X$

$X = 68$

29. Solve for x and find both angles

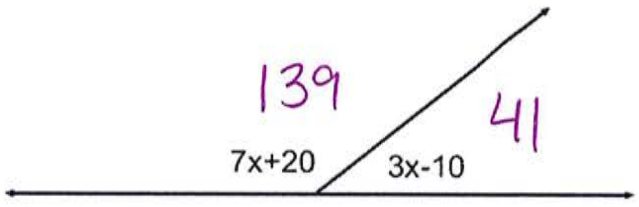


$2X+10+3X=90$

$5X = 80$

$X = 16$

30. Solve for x and find both angles



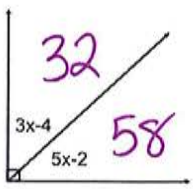
$7X+20+3X-10 = 180$

$10X+10 = 180$

$10X = 170$

$X = 17$

31. Solve for x and find both angles



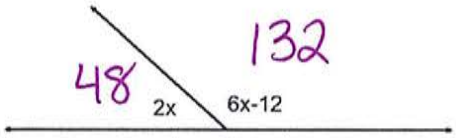
$3x-4+5x-2=90$

$8x-6=90$

$8x=96$

$x=12$

32. Solve for x and find both angles



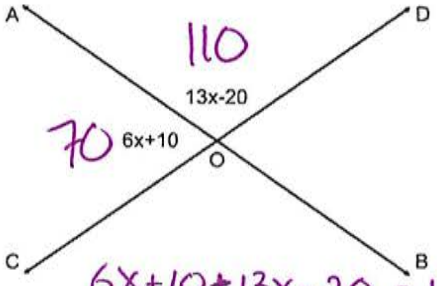
$2x+6x-12=180$

$8x-12=180$

$8x=192$

$x=24$

33. Solve for x and find both angles



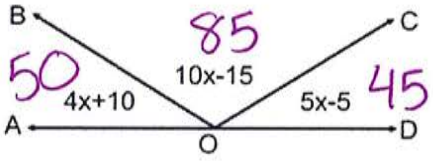
$6x+10+13x-20=180$

$19x-10=180$

$19x=190$

$x=10$

34. Solve for x and find all angles



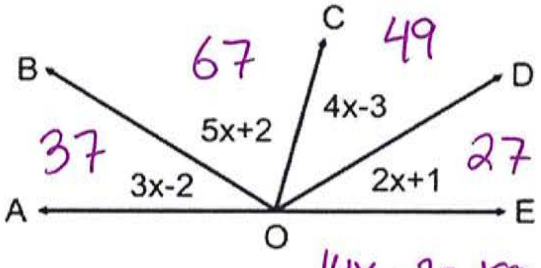
$4x+10+10x-15+5x-5=180$

$19x-10=180$

$19x=190$

$x=10$

35. Solve for x and find all angles

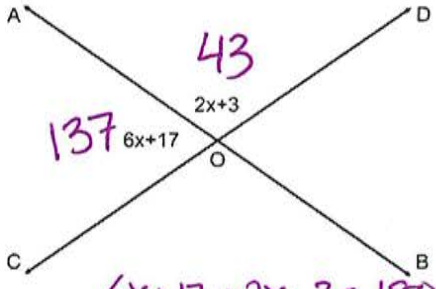


$14x-2=180$

$14x=182$

$x=13$

36. Solve for x and find both angles



$6x+17+2x+3=180$

$8x+20=180$

$8x=160$

$x=20$