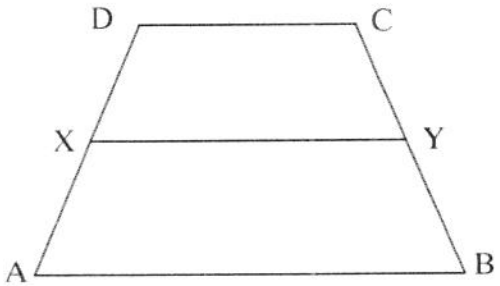
TRAPEZOIDS II

NAME:_____
DATE_____HOUR___

Trapezoid ABCD



1. Name the bases _____ & _____

2. What is $\overline{XY}$ called? _____

3. Give an equation relating the length of $\overline{AB}$, $\overline{CD}$, and $\overline{XY}$ _____

4. If AB = 2c, DC = 4c, and XY = 12, find c.

   c=_____

5. Explain why ∠A is supplementary to ∠D.
   If CD ll AB, then _____ are supplementary.

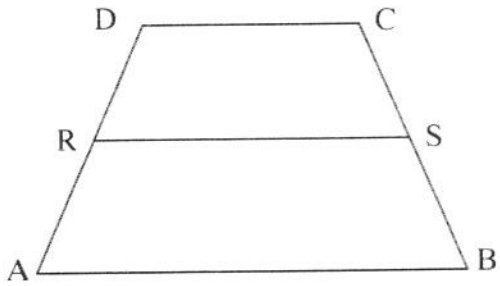
II. Use trapezoid DCBA for #6-12.

6. AB = 10, DC = 8, RS = _____

7. RS = 7, AB + DC = _____

8. BC = 12 , CS = _____

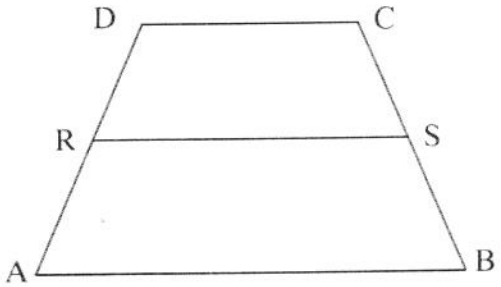
9. m∠A = 80, m∠D = _____



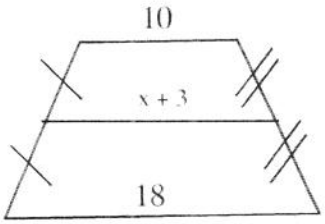
10. m∠C = x, m∠B = x + 20, m∠B = _____

11. AB = 6x - 1, RS = 5x - 1, DC = 3x + 2, x = _____

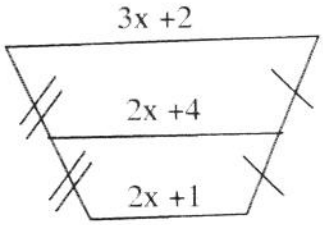
12. AB = 5x-11, RS = 2x+3, DC= 3x - 7, x = _____



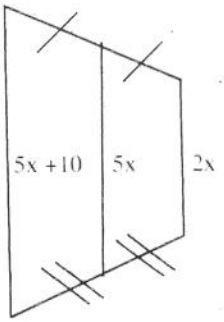
III. Solve for x.

13. 

x = _____

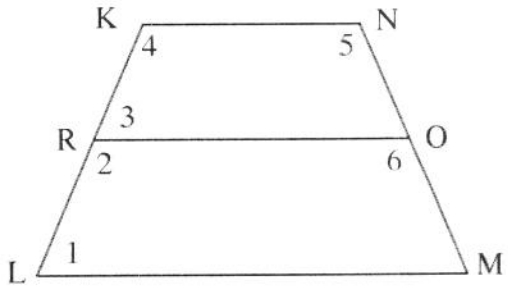
14. 

x = _____

15. 

x = _____

IV. Use Isosceles trapezoid KNML for # 16-18.



16. m ∠M = 80.

find: m∠1=_____ m∠2=_____

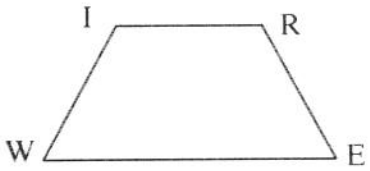
m∠3=_____ m∠4=_____

m∠5=_____ m∠6=_____

17. KL = 9 ½ , KN = 9, RO = 11, Perimeter of trapezoid KNML = _____

18. KR = 7, KN = 12, RO = 14, Perimeter of trapezoid KNML = _____

V. Use trapezoid WIRE for #19-20



19. If WIRE is isosceles, and m ∠ E = 36, m ∠ I = _____, m∠R = _____

20. If ∠I ≅ ∠R, IR = 12cm, WE = 16cm, and the perimeter of trapezoid WIRE is 38cm.

FIND: WI = _____ ER = _____