Geometry Honors

Mid-Term Exam Practice

Ms. Chan's review

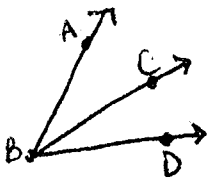
1) All Geometry Honors students are smart. (Rewrite in if-then form)
2) Identify the hypothesis & conclusion: If I get an "A", I will be happy
3) Write the converse of the statement in #2.
4) The n^{th} term that represents the sum of (a) n positive integers is? (b) n even integers is? (c) n odd integers is?
5) Find the sum of $53 + 55 + 57 + \ldots + 255$.
6) Find the sum of $2 + 4 + 6 + \ldots + 252$.
7) Find the sum of the numbers from 80 to 700.
8) Find the next term: $24, 6, \frac{3}{2}, \frac{3}{8}, \ldots$
9) Find the next term of: $12, 13, 20, 56, 145, 312, \ldots$
10) Find the 50^{th} term: $4, \frac{15}{2}, 12, \frac{35}{2}, 24$ (Hint: Create your own term/value chart.)

Term	1	2	3	4	5
value	4	$\frac{15}{2}$	12	$\frac{35}{2}$	24

11) Find the n^{th} term of: $0, -1, -1, 0, 2, 5$
12) Find the 65^{th} term of: $9, 13, 17, 21, 25$
13) How many 2-person conversations are possible at a party of 280 people?
14) How many diagonals can be drawn from one vertex of a dodecagon?
15) Finding the n^{th} term problem
16) Definition (18)-(20) notation for lines, line segments, rays
17) Definition
(21) $\angle 1$ & $\angle 2$ are a linear pair.
(22) $m\angle 1 = 54°$. $m\angle 2 = ?$

(23) B is btwn. A and C. Find x if $AB = 4x+3$, $BC = 12x+5$ and $AC = 24$

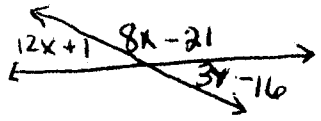
(24)



$m\angle ABC = 3x+6$
$m\angle CBD = 7x+4$
$m\angle ABD = 70$
Find $m\angle ABC$ and $m\angle CBD$.

(25)-(31) Know constructions & definitions

(32)

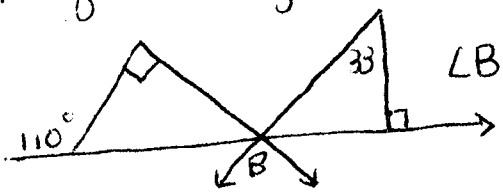


$x = ?$
$y = ?$

(33) slopes of $\parallel$, $\perp$

(34) triangle - dodecagon shapes

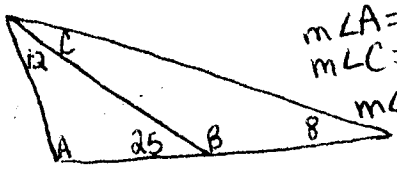
(35)



$\angle B = ?$

(36) Joker

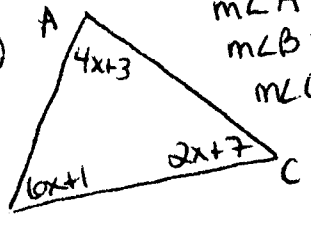
(37)



$m\angle A = ?$
$m\angle C = ?$
$m\angle B = ?$

(38) Joker

(39)

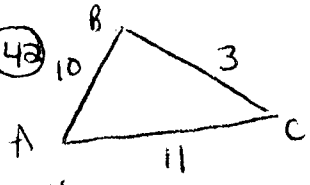


$m\angle A = ?$
$m\angle B = ?$
$m\angle C = ?$ (to the nearest tenth)

(40) Joker

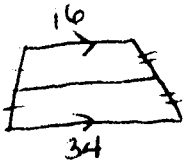
(41) Two sides of a $\triangle$ are 16 and 25. The third is ?

(42)



write measures of the $\angle$s in order from greatest to least.

(43)



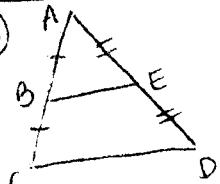
midsegment = ?

(44) How many sides does an equiangular polygon have if each angle measures 174°?

(45) The measure of each exterior $\angle$ of a regular octagon is ?

46 thru 48 corresponding angles, AIA, AEA, SSIA

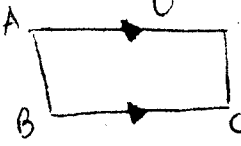
49 thru 55 know characteristics of quadrilateral flowchart

56 

$BE = \frac{7}{2}x + 5$

$CD = 20x + 3$

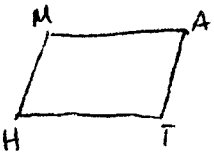
$x = ?$

57 

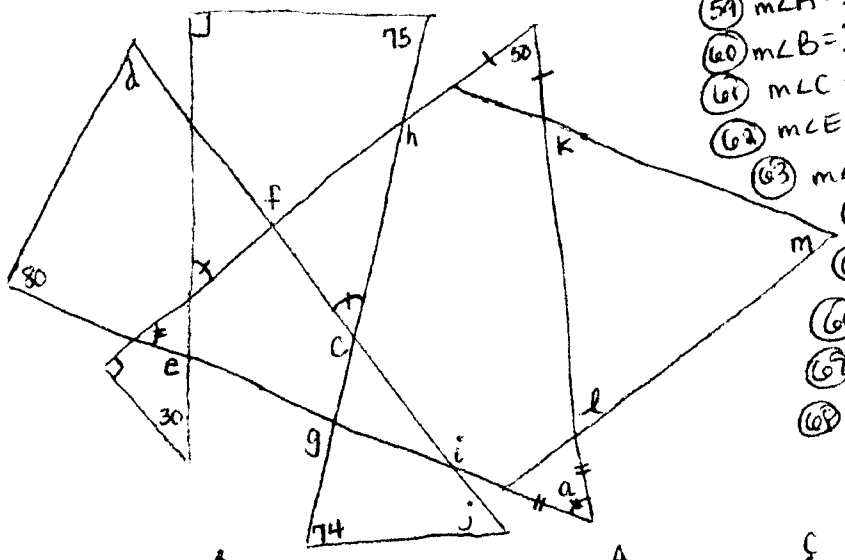
$\angle A = 2x + 30$

$\angle B = 10x - 18$

$m\angle A = ?$

58 If 

is a parallelogram and $mA = 3x - 5$ and $HT = 8x + 5$ and $HM = 2x - 1$ and $TA = 6y + 18$. Find x and y.



59 $m\angle A = ?$

60 $m\angle B = ?$

61 $m\angle C + \angle D = ?$

62 $m\angle E + m\angle F = ?$

63 $m\angle G = ?$

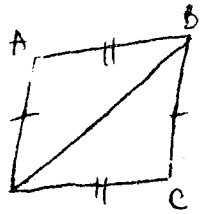
64 $m\angle H = ?$

65 $m\angle I = ?$

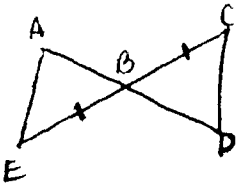
66 $m\angle J = ?$

67 $m\angle K = ?$

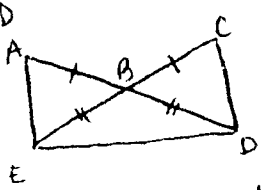
68 $m\angle L + \angle M = ?$

61 

$\triangle ABD \cong \triangle CDB$ b/c of ?

70 

What must be true in order for $\triangle ABE \cong \triangle DBC$ by ASA?

71 

$\triangle ABE \cong$?

72 Joker

73 Joker

74 Joker

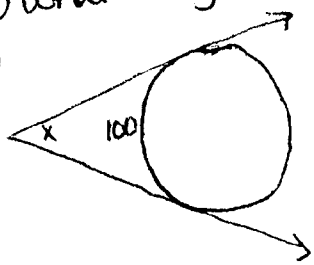
75 Definition ( )

76 Definition ( )

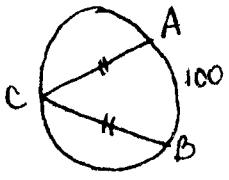
77 Defn. ( )

78 Know what a:
- A major arc is
- B minor arc is
- C diameter is

79 What do you know about tangent segments?

80 

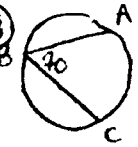
$x = ?$

81 

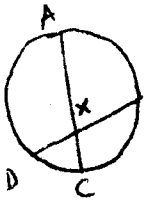
radius = 20 cm

arc length $\overset{\frown}{ABC} = ?$

82 Joker

83 

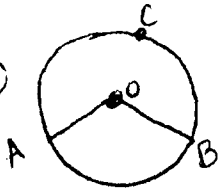
$m\overset{\frown}{AC} = ?$

84 

$m\overset{\frown}{AD} = 140$

$m\overset{\frown}{BC} = 40$

$m\angle X = ?$

85 

$m\angle OBA = 50$

$m\overset{\frown}{ACB} = ?$

86 - 100 are True/False questions based on your knowledge from (definitions, theorems) (quadrilateral flow chart), Characteristics of Δs chart