Geometry
Unit 1C Review

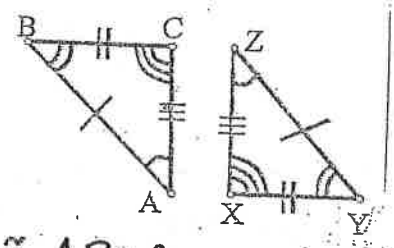
Name: _____

Name the corresponding angles and sides for each pair of congruent triangles.

1. $\triangle DEF \cong \triangle PQR$ $\angle D \cong \angle P$ $\overline{DE} \cong \overline{PQ}$ $\angle E \cong \angle Q$ $\overline{EF} \cong \overline{QR}$ $\angle F \cong \angle R$ $\overline{DF} \cong \overline{PR}$

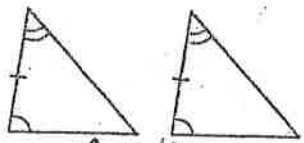
2. $\triangle FMG \cong \triangle HNJ$ $\angle F \cong \angle H$ $\overline{FM} \cong \overline{HN}$ $\angle M \cong \angle N$ $\overline{MG} \cong \overline{NJ}$ $\angle G \cong \angle J$ $\overline{FG} \cong \overline{HJ}$

3. $\angle A \cong$ $\angle Z$
4. $\angle B \cong$ $\angle Y$
5. $\angle C \cong$ $\angle X$
6. $\overline{AB} \cong$ $\overline{YZ}$
7. $\overline{BC} \cong$ $\overline{XY}$
8. $\overline{CA} \cong$ $\overline{XZ}$
9. $\triangle ABC \cong$ $\triangle ZYX$

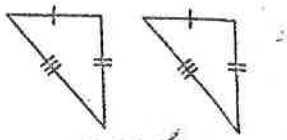


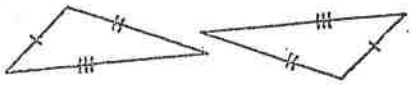
10. $\triangle YXZ \cong$ $\triangle BCA$

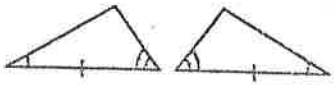
Determine which rule is used to prove that the triangles below are congruent. Write *ASA*, *SSS*, *AAS*, or *SAS* under each pair of triangles.

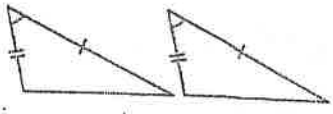
11. 
ASA

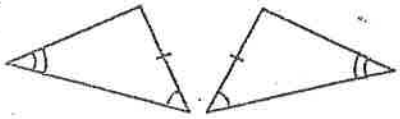
12.
AAS

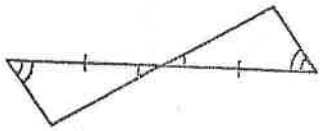
13. 
SSS

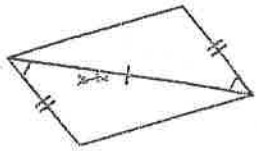
14. 
SSS

15. 
ASA

16. 
SAS

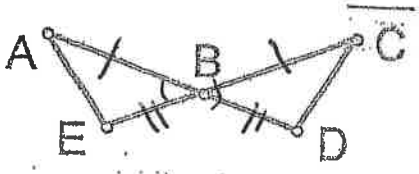
17. 
AAS

18. 
ASA

19. 
SAS

20.

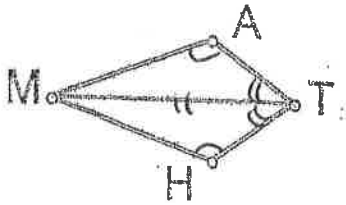
Given: $\overline{AB} \cong \overline{CB}$
$\overline{EB} \cong \overline{DB}$
Prove: $\triangle ABE \cong \triangle CBD$



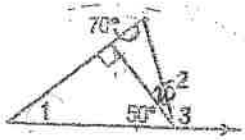
SAS

21.

Given: $\angle A \cong \angle H$
$\overline{MT}$ bisects $\angle ATH$
Prove: $\triangle MAT \cong \triangle MHT$

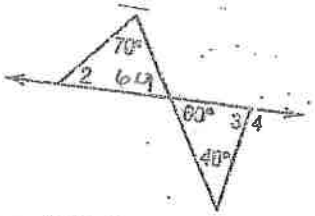


AAS



22. What is $m\angle 1$? 40°

23. What is $m\angle 2$? 20°

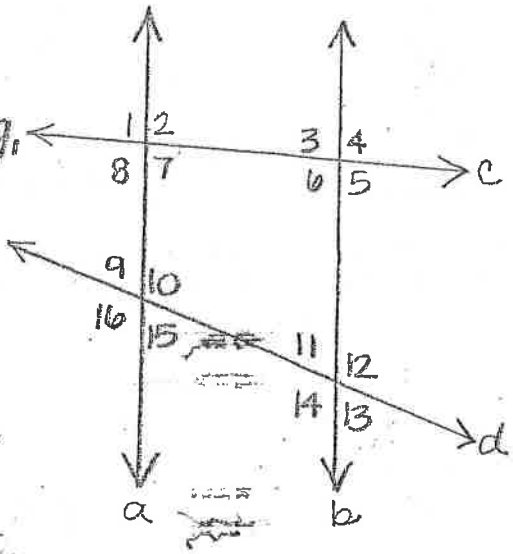


24. What is $m\angle 1$? 60°

25. What is $m\angle 2$? 50°

26. What is $m\angle 3$? 80°

Identify each pair of angles as vertical, linear pair, corresponding, consecutive interior, consecutive exterior, alternate interior, or alternate exterior.



27. 2 and 6
alt int

28. 4 and 6
vertical

29. 7 and 10
cons. int

30. 4 and 14
alt ext.

31. 9 and 15
vertical

32. 7 and 9
alt int

33. 16 and 14
corr

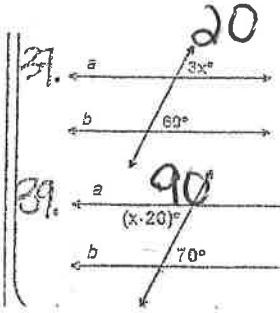
34. 6 and 7
cons. int.

35. 12 and 13
linear pair

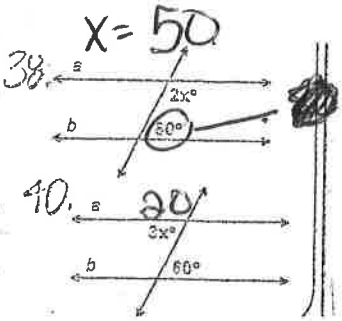
36. 4 and 13
cons ext.

Solve for x.

37. 20



38. x = 50

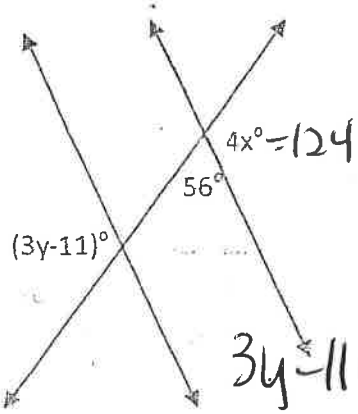


39. 90

40. 20

38 → circled is 80°

41. Find x and y in the figure.



3y-11=124

x = 31°

y = 45°

In the figure line p is parallel to line q. Find the measure of each angle.

42. Find $m < 3$ if $m < 1 = 110$. 110

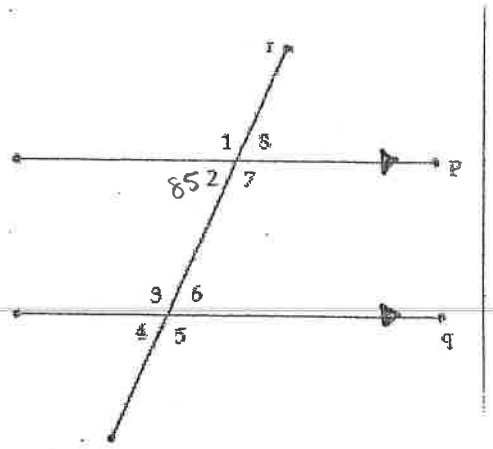
43. If $m < 2 = 85$, find $m < 3$. 95

44. If $m < 4 = 35$, find $m < 8$. 35

45. If $m < 6 = 70$, find $m < 2$. 70

46. If $m < 3 = 120$, find $m < 8$. 60

47. If $m < 7 = 5x + 10$ and $m < 5 = 40$, find x. 6



48. In the figure, $m\angle 1 = 37°$. Find the measure of each angle.

a) ∠9 37

b) ∠13 37

c) ∠5 37

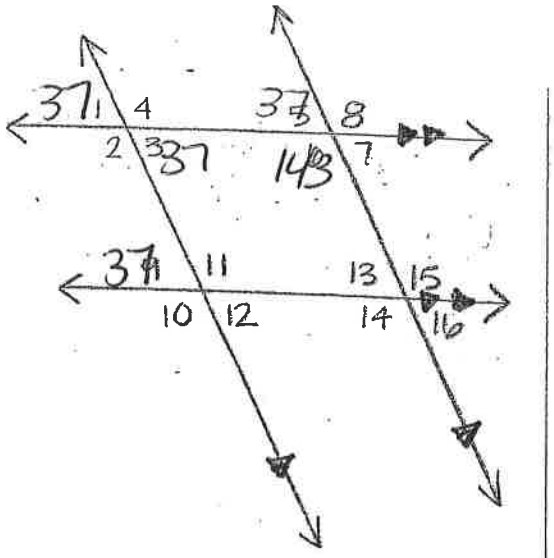
d) ∠7 37

e) ∠3 37

f) ∠10 143

g) ∠6 143

h) ∠15 143



49. In the figure, $m\angle 3 = 98°$ and $m\angle 12 = 55°$. Find the measure of each angle.

a) ∠1 98

b) ∠13 125

c) ∠16 55

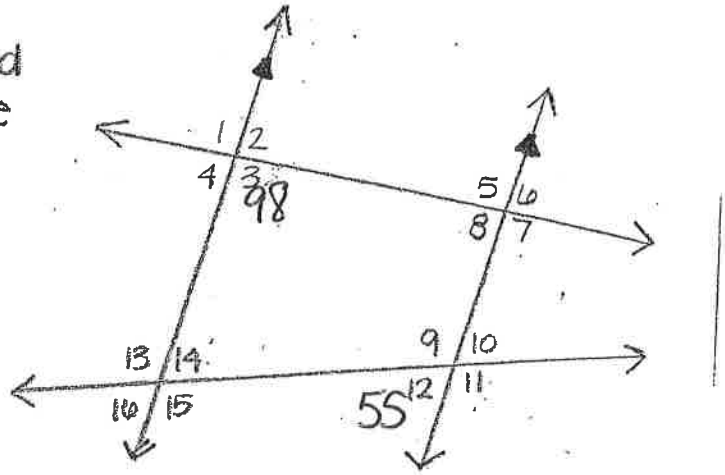
d) ∠4 82

e) ∠8 82

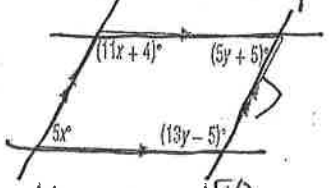
f) ∠6 82

g) ∠14 55

h) ∠11 125



50. Find x & y.



$16x + 4 = 180$

$16x = 176$

$x = 11$

$y = 10$

$18y = 180$

$5x + 11x + 4 = 180$

$5y + 5 + 13y - 5 = 180$