4.1 Triangles   NAME:_____

CORRECTIVE ASSIGNMENT   DATE:_____

Classify each triangle by its sides (scalene, isosceles, or equilateral) as well as by its angles (acute, obtuse, or right).

1)

2)

3)

4)

Find the value of x.

5)

x 102°

6)

x

60°

7)

9

x

8)

x 6

9)

12   $3x - 9$
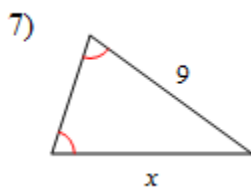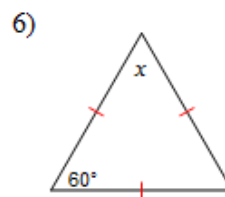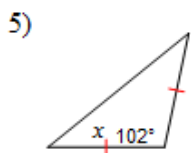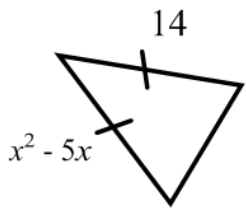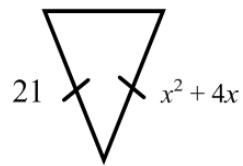
10)

$7x - 9$

$4x + 12$

11)

$x^2 - 2x$ 35
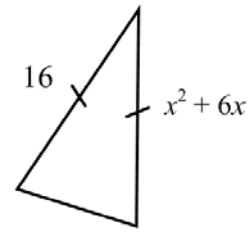
12)

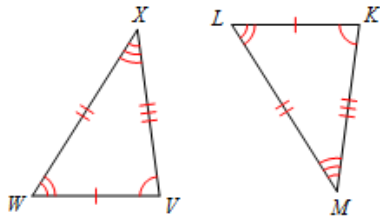14

$x^2 - 5x$

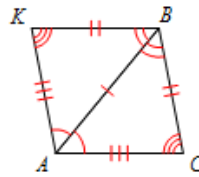13)

21    $x^2 + 4x$

14)

16    $x^2 + 6x$
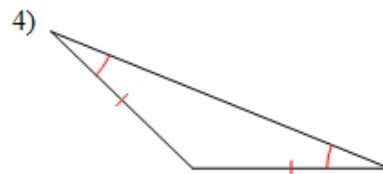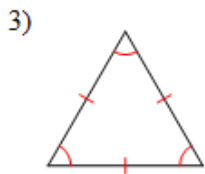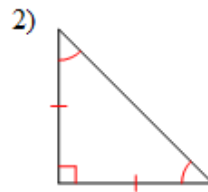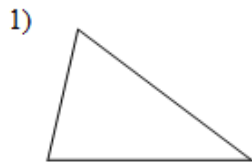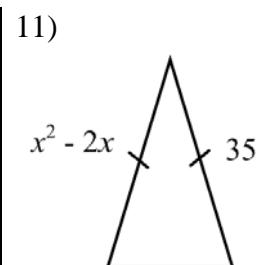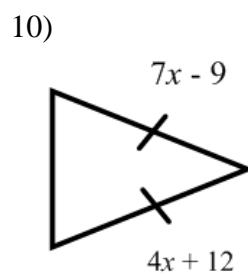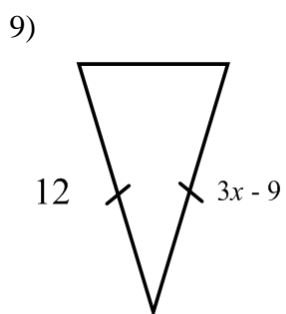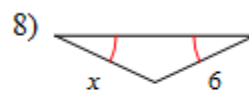
Write a statement that indicates that the triangles in each pair are congruent.

15)

X   L   K

W   V   M

16)

K   B

A   C

Mark the angles and sides of each pair of triangles to indicate that they are congruent.

17) $\triangle DEF \cong \triangle STU$

D   U   S

F   E   T

18) $\triangle HIJ \cong \triangle HTU$

U   T

H

J   I
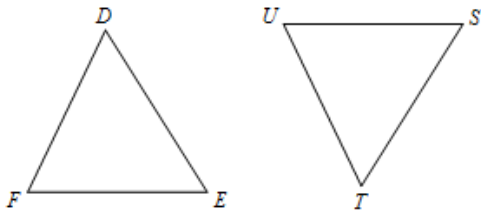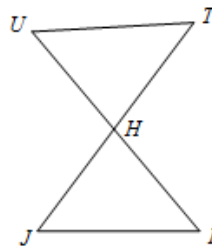
Complete each congruence statement by naming the corresponding angle or side.

19) $\triangle KML \cong \triangle STU$

L   U   T

M   K   S

$\overline{LK} \cong ?$

20) $\triangle JIH \cong \triangle VWX$

H   W   X

I   J   V
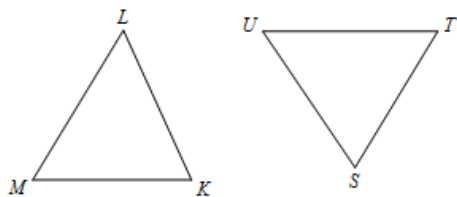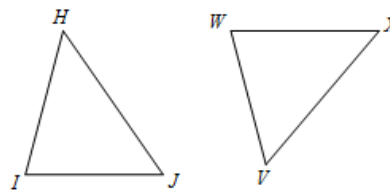
$\angle I \cong ?$

21) $\triangle WXV \cong \triangle FED$
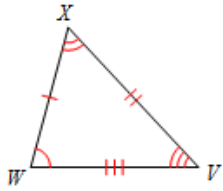
$\angle V \cong ?$

22) $\triangle ZYX \cong \triangle LMN$

$\angle X \cong ?$

23) $\triangle WVU \cong \triangle VWN$

$\overline{VU} \cong ?$
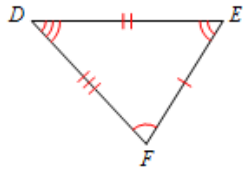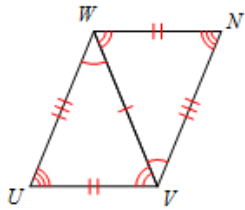
24) $\triangle DEC \cong \triangle UCV$

$\angle E \cong ?$

ANSWERS TO 4.1 CORRECTIVE ASSIGNMENT!

1) acute scalene   2) right isosceles   3) equilateral   4) obtuse isosceles
5) 39°   6) 60°   7) 9   8) 6

9) 7   10) 7   11) -5 and 7

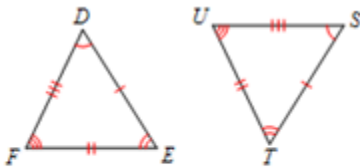12) -2 and 7   13) -7 and 3   14) -8 and 2
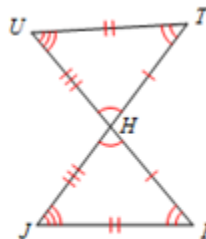
15) $\triangle VWX \cong \triangle KLM$ 16) $\triangle ABC \cong \triangle ABK$

17)

18)

19) $\overline{US}$

20) $\angle W$ 21) $\angle D$ 22) $\angle N$ 23) $\overline{WN}$
24) $\angle UCV$