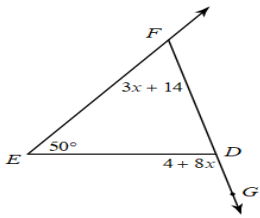Triangle Theorems Remediation Practice
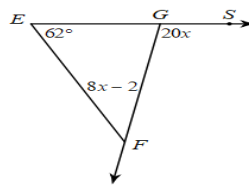
Name _____ Date _____ Block _____

Solve for x.
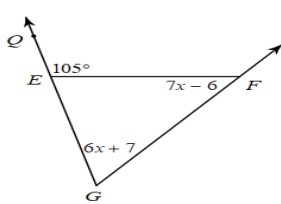
1)

$3x + 14$

$50°$

$4 + 8x$

2)

$62°$ $20x$

$8x - 2$
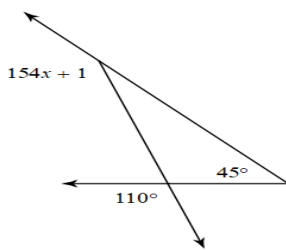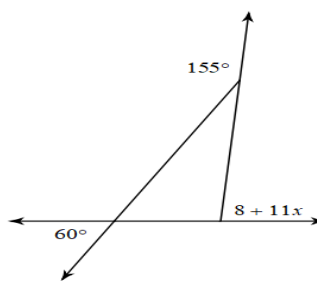
3)

$105°$

$7x - 6$

$6x + 7$

4)

$10x$

$6x - 2$

$50°$

5)

$154x + 1$

$45°$

$110°$

6)

$155°$

$8 + 11x$

$60°$

7)

$142 + x$

$25°$

$110°$

8)

$x + 131$

$40°$

$20°$
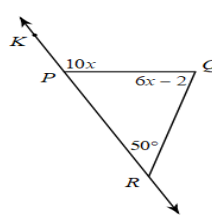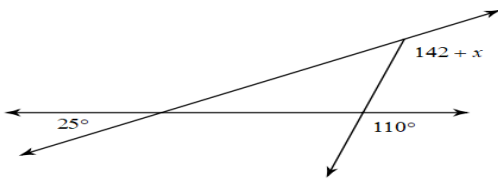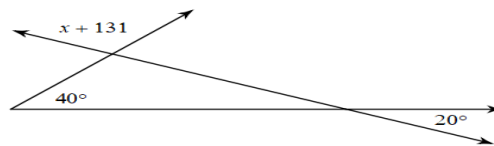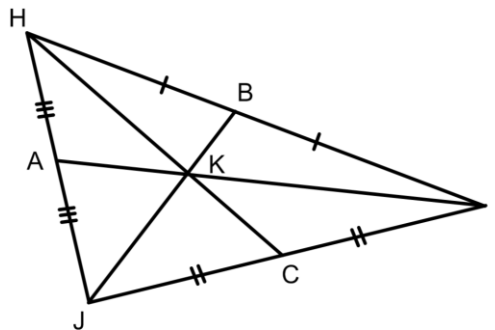
5. If $\overline{HK} = 3x - 2, \overline{KC} = 57$, find x =

6. If $\overline{BJ} = 48, \overline{JK} = 18y + 12$, find y =

7. If $\overline{AK} = 6z + 9, \overline{KI} = 36$, find z =

8. If $\overline{JC} = 25, \overline{JI} = 6v - 13$, find v =

9. If $\overline{BK} = 3r + 7, \overline{JB} = 4r - 5$, find r =

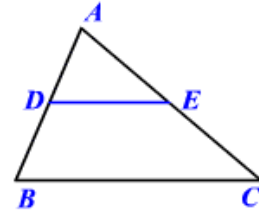10. If $\overline{AH} = 18, \overline{HJ} = 6w + 4$, find w =

Triangle Theorems Remediation Practice
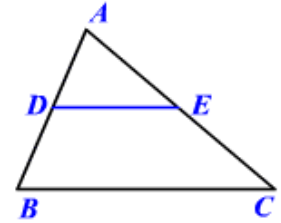
Name _____ Date _____ Block _____

Classify the following triangles by sides and angles.

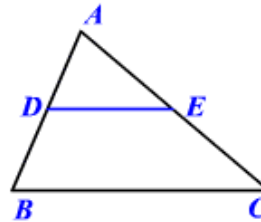Assume that DE is parallel to BC in each of the following problems.

1. Using the triangle proportionality theorem, find the value of x, if AD is 6, AE is 3x, DB is 12, and EC is 18.

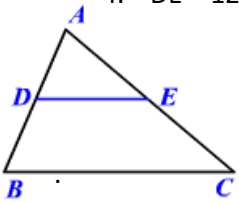2. Using the triangle proportionality theorem, find the value of x, if AB is 18, AE is x-5, AD is 6, and EC is 20.

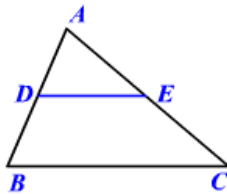3. Using the triangle proportionality theorem, find the value of x, if AC is 32, AD is x+2, DB is 9, and EC is 18.

Given that DE is a midsegment in the below triangles, find the value of x with the following information.

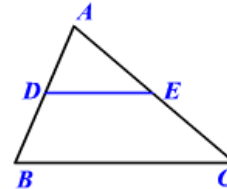4. DE = 12, and BC = x+4

5. BC = 84, DB = 14, and DE = 2x − 21

6. DE = 9 and BC = 4x+14

Classify the following triangles.