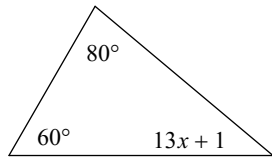


Unit 2/3 - Congruence and Triangles

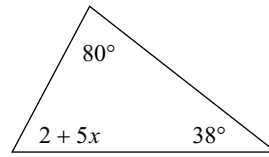
Solve for  $x$ .

1)



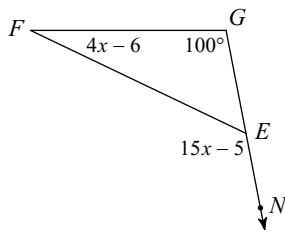
- A) -4      B) 3
- C) -11     D) -12

2)



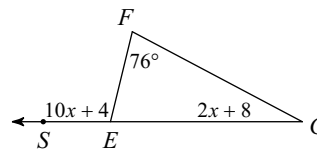
- A) -10     B) -2
- C) -9      D) 12

3)



- A) 10      B) 7
- C) 3       D) 9

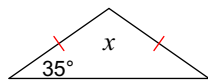
4)



- A) 8        B) 10
- C) 2       D) 6

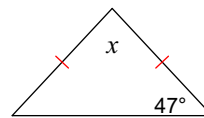
Find the value of  $x$ .

5)



- A) 119°    B) 124°
- C) 142°    D) 110°

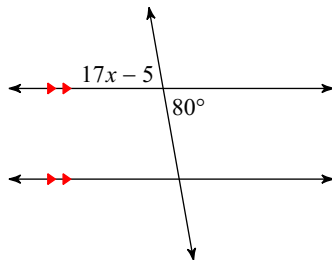
6)



- A) 86°     B) 78°
- C) 85°     D) 81°

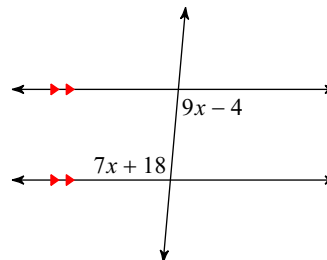
Solve for  $x$ .

7)



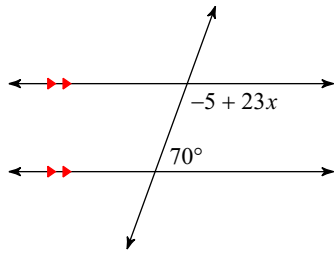
- A) 5        B) -8
- C) 2        D) 9

8)



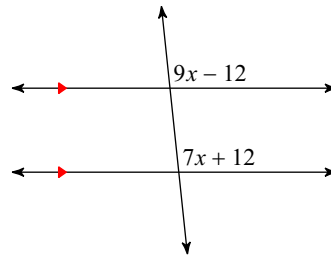
- A) 3        B) 11
- C) 8        D) -5

9)



- A) 5      B) 4  
C) -7     D) 3

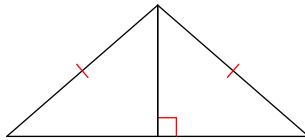
10)



- A) 8      B) 12  
C) -7     D) 9

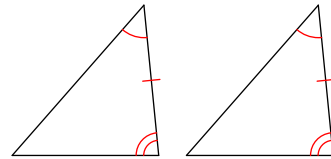
**State if the two triangles are congruent. If they are, state how you know.**

11)



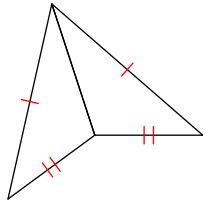
- A) LL      B) HL  
C) HA     D) SAS

12)



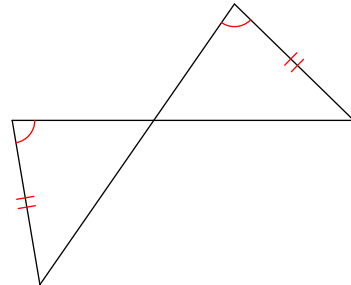
- A) HL      B) SSS  
C) HA     D) ASA

13)



- A) HL      B) Not congruent  
C) SSS     D) SAS

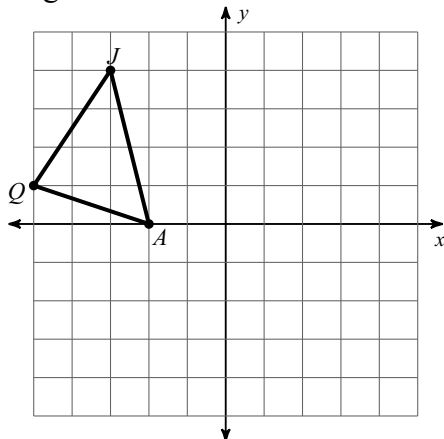
14)



- A) Not congruent      B) ASA  
C) LA                    D) AAS

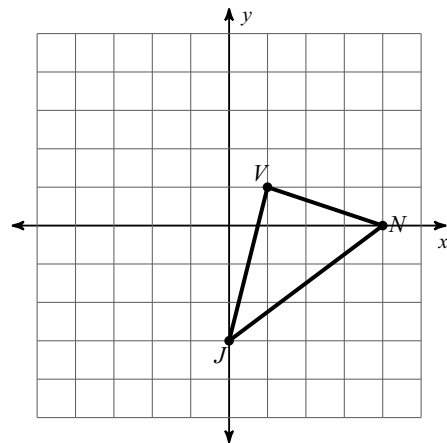
**Find the coordinates of the vertices of each figure after the given transformation.**

15) rotation  $90^\circ$  counterclockwise about the origin



- A)  $J'(-1, 4), A'(-2, 0), Q'(1, 1)$   
B)  $J'(1, 4), A'(0, 0), Q'(3, 1)$   
C)  $Q'(5, -1), J'(3, -4), A'(2, 0)$   
D)  $Q'(-1, -5), J'(-4, -3), A'(0, -2)$

16) reflection across  $x = 2$

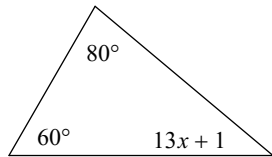


- A)  $V'(1, 1), N'(4, 2), J'(0, 5)$   
B)  $V'(3, 1), N'(0, 0), J'(4, -3)$   
C)  $J'(0, 3), V'(-1, -1), N'(-4, 0)$   
D)  $V'(1, 1), N'(-2, 0), J'(2, -3)$

Unit 2/3 - Congruence and Triangles

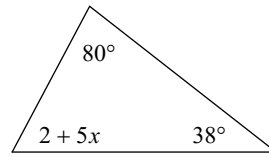
Solve for  $x$ .

1)



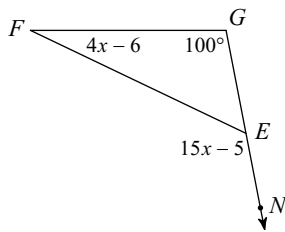
- A) -4
- \*B) 3
- C) -11
- D) -12

2)



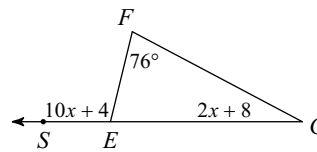
- A) -10
- B) -2
- C) -9
- \*D) 12

3)



- A) 10
- B) 7
- C) 3
- \*D) 9

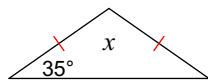
4)



- A) 8
- \*B) 10
- C) 2
- D) 6

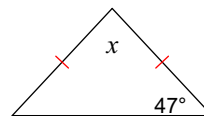
Find the value of  $x$ .

5)



- A) 119°
- B) 124°
- C) 142°
- \*D) 110°

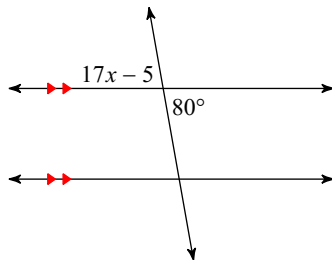
6)



- \*A) 86°
- B) 78°
- C) 85°
- D) 81°

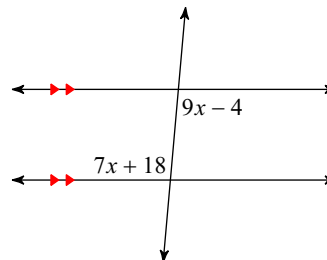
Solve for  $x$ .

7)



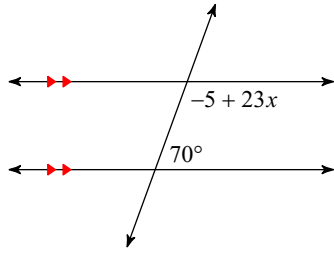
- \*A) 5
- B) -8
- C) 2
- D) 9

8)



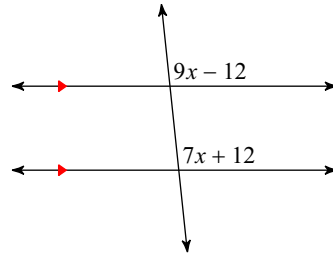
- A) 3
- \*B) 11
- C) 8
- D) -5

9)



- \*A) 5      B) 4  
C) -7      D) 3

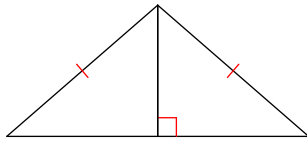
10)



- A) 8      \*B) 12  
C) -7      D) 9

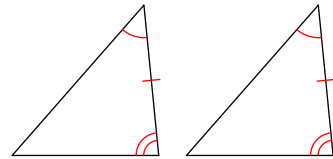
**State if the two triangles are congruent. If they are, state how you know.**

11)



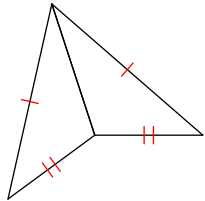
- A) LL      \*B) HL  
C) HA      D) SAS

12)



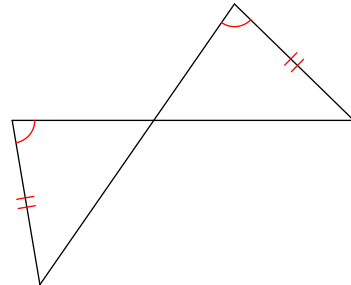
- A) HL      B) SSS  
C) HA      \*D) ASA

13)



- A) HL      B) Not congruent  
\*C) SSS      D) SAS

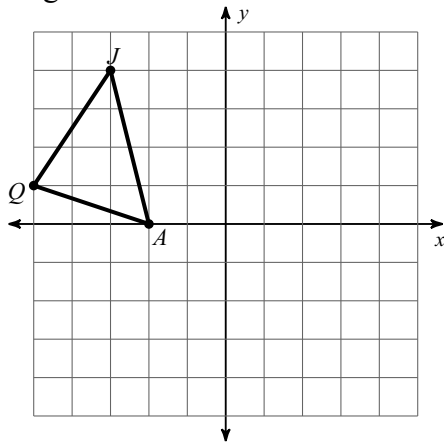
14)



- A) Not congruent      B) ASA  
C) LA      \*D) AAS

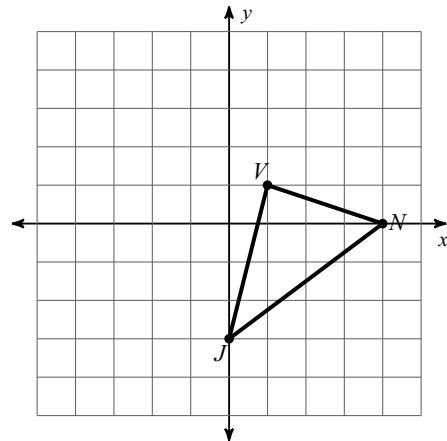
**Find the coordinates of the vertices of each figure after the given transformation.**

15) rotation  $90^\circ$  counterclockwise about the origin



- A)  $J'(-1, 4), A'(-2, 0), Q'(1, 1)$   
B)  $J'(1, 4), A'(0, 0), Q'(3, 1)$   
C)  $Q'(5, -1), J'(3, -4), A'(2, 0)$   
\*D)  $Q'(-1, -5), J'(-4, -3), A'(0, -2)$

16) reflection across  $x = 2$



- A)  $V'(1, 1), N'(4, 2), J'(0, 5)$   
\*B)  $V'(3, 1), N'(0, 0), J'(4, -3)$   
C)  $J'(0, 3), V'(-1, -1), N'(-4, 0)$   
D)  $V'(1, 1), N'(-2, 0), J'(2, -3)$