

# Fall Final Rev. Key

## Unit 1:

1. Reflect over  $y=x$  & up 2 OR  
Right 2 then reflect over  $y=x$
2. Reflect over  $y=-x$
3. Reflect over  $y$ -axis then vert. stretch by 3  
OR vert. stretch by 3 then ref. over  $y$ -axis.
4. 90°CCW rotate
5.  $(x,y) \rightarrow (-x,-y)$
6.  $(x,y) \rightarrow (10x,y)$
7.  $(x,y) \rightarrow (x-4,y+8)$
7.  $(x,y) \rightarrow (y,x)$
9.  $(x,y) \rightarrow (y,-x)$
10.  $(x,y) \rightarrow (\frac{1}{3}x, \frac{1}{3}y)$
14.  $Z''(-3,20)$
15.  $R(-5,0)$
16.  $J'''(-5,1)$

17. Answers may vary.

One possible: ① Reflect over  $x=-1$   
② Translate down 3

18. Answers may vary.

Dilate by  $\frac{1}{2}$  then reflect over  $x$ -axis.

19. Reflect over  $y=2$  then translate 5 left & 4 down.

## Unit 2:

1. If  $\overline{QR} \cong \overline{RS}$ , then  $R$  is midpoint of  $\overline{QS}$ . (T)  
If  $R$  is not the midpoint of  $\overline{QS}$ , then  $\overline{QR} \not\cong \overline{RS}$ . (T)  
If  $\overline{QR} \not\cong \overline{RS}$ , then  $R$  is not midpoint of  $\overline{QS}$ . (T)
3. Symmetric POE
4. Transitive Prop.
5. Reflexive POE

6. Seg. add prop.  
 Substitution prop.  
 combine like terms  
 Subtraction POE  
 Division POE

8.  $97^\circ$                       9.  $62^\circ$

10.  $\angle 3 \cong \angle 5$ ,  $\angle 4 \cong \angle 6$

11.  $\angle 1 \cong \angle 7$ ,  $\angle 2 \cong \angle 8$

12.  $\angle 4 \cong \angle 5$ ,  $\angle 3 \cong \angle 6$

13.  $\angle 1 \cong \angle 5$ ,  $\angle 4 \cong \angle 8$ ,  $\angle 2 \cong \angle 6$ ,  $\angle 3 \cong \angle 7$

14.  $m\angle 3 = 80^\circ$   $m\angle 4 = 80^\circ$   $m\angle 5 = 100^\circ$   $m\angle 6 = 119^\circ$

$m\angle 7 = 61^\circ$   $m\angle 8 = 61^\circ$   $m\angle 9 = 119^\circ$   $m\angle 10 = 39^\circ$

$m\angle 11 = 141^\circ$   $m\angle 12 = 141^\circ$

Same Side int  $\angle$ 's

Alt. int  $\angle$ 's

Alt. ext  $\angle$ 's.

16. Conv. of alt. int  $\angle$ 's

17. Conv. Cones  $\angle$ 's

18.  $\angle 7 \cong \angle 6$  need to be

19. Conv. of same side

Supplementary

int  $\angle$ 's

20.  $x \angle 23$

21.  $x \angle 78$

### Unit 3:

1.  $x = 11$

2.  $x = 12$

$m\angle TWA = 123^\circ$

$m\angle A = 30^\circ$

3.  $x = 18$

4. Isosceles

Obtuse  $\Delta$

5.  $\Delta BDA \cong \Delta DBC$  by ASA

6.  $\Delta BAC \cong \Delta KJL$  by HL

7. NO, can't use AA

to prove  $\Delta$ 's  $\cong$ .

8.  $\angle DUT \cong \angle JUT$

9.  $\overline{PS} \cong \overline{QD}$

10.  $\angle BAD \cong \angle DCB$

11.  $x = 5$   
 $CE = 25$

12.  $x = 8$   
37 is longest

13.  $90^\circ$

14.  $36^\circ, 36^\circ, 108^\circ$

15.  $\overline{AB}, \overline{BC}, \overline{AC}$   
 $\angle C, \angle A, \angle B$

16. Can't make a  $\Delta$ .

19. 12      20. 22      21. 12      22.  $55^\circ$

### Unit 4:

1. 91m      2.  $27^\circ$       6. 43.2      7.  $x = 13$

8.  $x = 7$       9. 39      21.  $x = 8$

10. 16.      25.  $x = 11$       24.  $x = 10$

11. A      12. C

19. 37.5      20.  $x = 2$

13. D      14. D

### Unit 5:

1. 27      2. 17      3. 13.5

4.  $78^\circ$       5.  $78^\circ$       6.  $102^\circ$

7.  $(-2, -4)$

8. 11      9. 11      10.  $81^\circ$       11.  $99^\circ$

14. Yes      15. No      16. No

18. 4025      19. 36      20. 60.5      21. 4025

22. 25      23.  $m\angle HJG = 31^\circ$

$m\angle GJH = 118^\circ$

20.  $x = 4$       21.  $x = 3$       13.  $m\angle K = 80^\circ$

17.  $\sqrt{32} = 4\sqrt{2}$       18.  $\sqrt{90} = 3\sqrt{10}$       4.  $83^\circ$  &  $97^\circ$

$\sqrt{80} = 4\sqrt{5}$