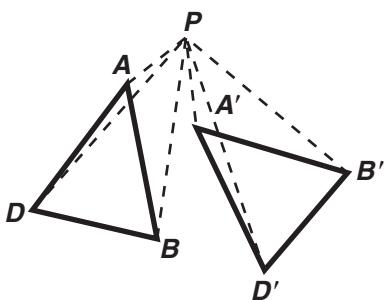


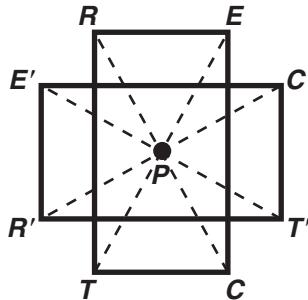
## Answers for Lesson 9-3, pp. 485–487 Exercises

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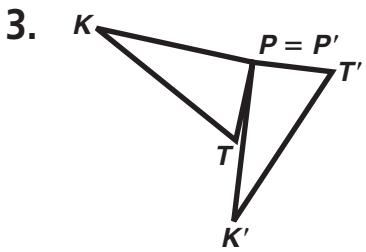
1.



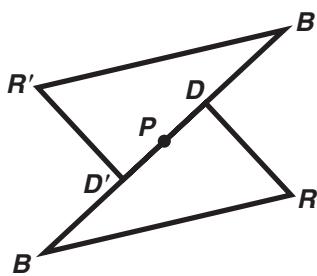
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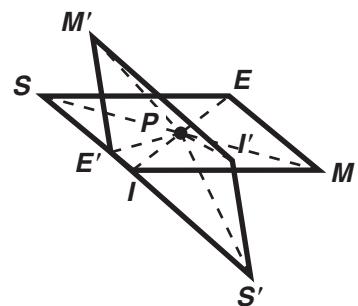
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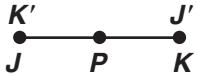
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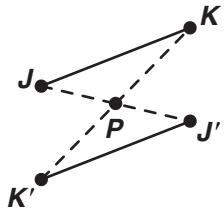
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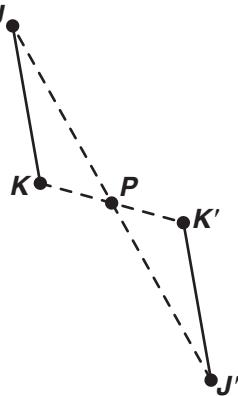
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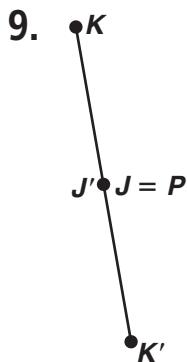
7.



8.



**Answers for Lesson 9-3, pp. 485–487 Exercises (cont.)**



15.  $\overline{LM}$

17.  $K$

19.  $108^\circ; 252$

10.  $H$

11.  $M$

12.  $C$

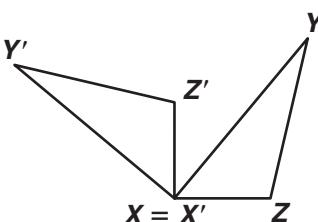
13.  $\overline{BC}$

14.  $A$

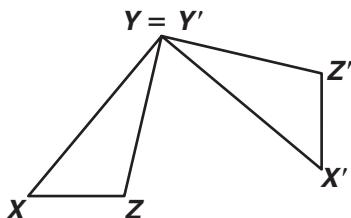
16.  $I$

18.  $90^\circ; 270$

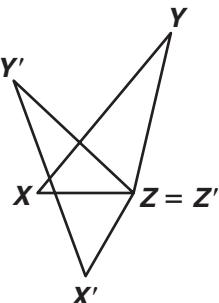
20.



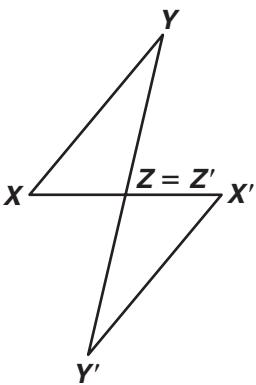
21.



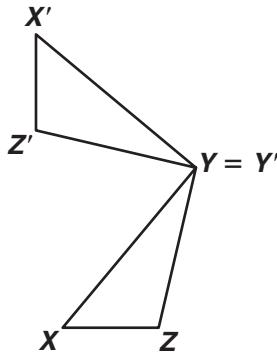
22.



23.



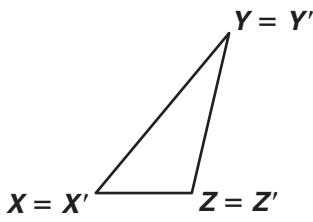
24.



## Answers for Lesson 9-3, pp. 485–487 Exercises (cont.)

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**25.**



- 26.**  $\overline{MN} \cong \overline{M'N'}; \overline{EN} \cong \overline{EN'};$   
 $\overline{ME} \cong \overline{M'E}; \angle M \cong \angle M';$   
 $\angle N \cong \angle N'; \angle MEN \cong$   
 $\angle M'EN'; \angle MEM' \cong$   
 $\angle NEN'$

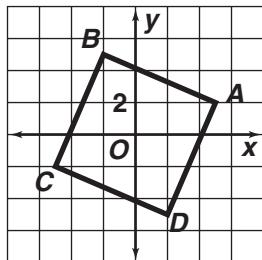
**27.**  $180^\circ$  rotation about its center

**28.** 180

**29.** 110

**30.** 290

**31. a–c.**



- d.** Square; all sides are  $\cong$  and all  $\angle$ s are  $90^\circ$ .

**32.** Draw two segments connecting preimage pts.  $A$  and  $B$  to image pts.  $A'$  and  $B'$ . Construct the  $\perp$  bis. of  $\overline{AA'}$  and  $\overline{BB'}$  to find  $C$ , the center of rotation.  $m\angle ACA'$  is the  $\angle$  of rotation.

**33.** Answers may vary. Sample: a  $90^\circ$  and a  $270^\circ$  rotation

**34.** Check students' graphs.

Rotation about origin:  $L'(1, 2)$ ,  $M'(2, 6)$ ,  $N'(-2, 4)$

Rotation about  $L$ :  $L'(2, -1)$ ,  $M'(3, 3)$ ,  $N'(-1, 1)$

Rotation about  $M$ :  $L'(5, -6)$ ,  $M'(6, -2)$ ,  $N'(2, -4)$

Rotation about  $N$ :  $L'(7, 0)$ ,  $M'(8, 4)$ ,  $N'(4, 2)$