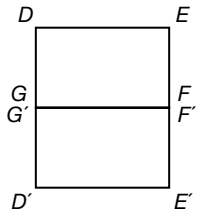
Warm Up 67

1. congruent
2. $AP = A'P$
3. A

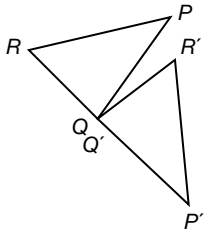
Lesson Practice 67

a. translation

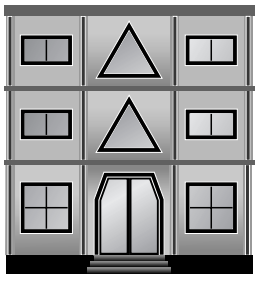
b.



c.



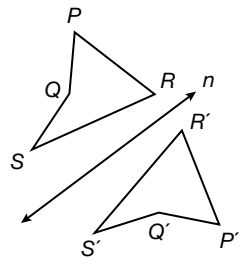
d.



Practice 67

1. 4,836.3 cm^2
2. 8.5 in.
3. $x = 10$
4. 5
5. perimeter = 240 ft; area = 4344 ft^2
6. translation
7. 18 feet/second
8. no
9. Sample: $2x^2 - 8 = 0$
10. $DE = 1.8$
11. 44°, 68°
12. 736 ft^2
13. 5 inches
14. **A**
15. Geometric probability does not apply to *a* because the player does not have an equally likely chance of hitting any area since the player is aiming for a specific location. Geometric probability does apply to *b*, because meteors are equally likely to occur in any given portion of the sky as any other.
16. $\frac{3}{4}bh$
17. 38,936 ft^2
18. **B**
19. $y = x - 1$
20. right triangle; 24
21. He has incorrectly used $1:2:\sqrt{3}$ the ratio for sides of a 30°-60°-90° triangle $k = 4$
22. could be reflection or rotation (by 180°); could not be translation

23.



24. Given: $\triangle ABC$ where $\angle A \neq \angle B \neq \angle C$
Prove: $AB \neq BC \neq CA$.
Proof: Assume that $AB = BC$. Since we know that if two sides of a triangle are congruent then the two angles opposite those sides are congruent, then that means that $\angle A \cong \angle C$. However, that contradicts our original given statement. Therefore, the assumption is incorrect. Thus, if a triangle has no two angles congruent then it has no two sides congruent.

25. $180° - 2(x + 2)°$

26. 251.2 cm^2

27. C

28. $\langle 4, 2 \rangle$

29. $P = 96$ ft; $A = 443.4 \text{ ft}^2$

30. yes; yes