

Chapter 4  
Study Guide  
Answers

## 4.1 Practice A

1.  $40 \text{ m}^2$       2.  $150 \text{ ft}^2$       3.  $99 \text{ in.}^2$       4.  $70 \text{ m}^2$

5. The side was used instead of the width.

$$A = 4(4) = 16 \text{ in.}^2$$

6.  $2 \text{ units}^2$       7.  $48 \text{ units}^2$       8.  $6 \text{ in.}$

**4.2 Practice A**

1.  $18 \text{ ft}^2$       2.  $35 \text{ cm}^2$       3.  $70 \text{ m}^2$       4.  $60 \text{ in.}^2$

5. The area of a triangle is one-half the product of its base and its height, not the product of its base and its height.

$$A = \frac{1}{2}(20)(9) = 90 \text{ ft}^2$$

6. Area of first triangle:  $36 \text{ mm}^2$

Area of second triangle:  $36 \text{ mm}^2$

The areas are the same.

7. two times greater

**4.3 Practice A**

1.  $34 \text{ units}^2$

2.  $33 \text{ units}^2$

3.  $45 \text{ in.}^2$

4.  $64 \text{ m}^2$

5. The bases should be added, not multiplied, in the formula.

$$A = \frac{1}{2}(3)(2 + 6) = 12 \text{ ft}^2$$

6.  $10 \text{ units}^2$

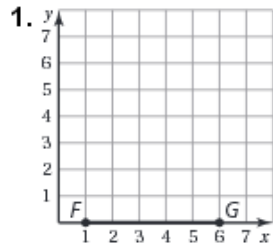
7.  $16 \text{ units}^2$

8.  $22 \text{ cm}$

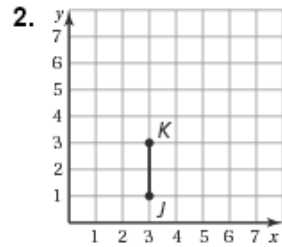
***Extension 4.3 Practice***

1.  $43 \text{ units}^2$     2.  $42 \text{ units}^2$     3.  $34 \text{ units}^2$     4.  $56 \text{ units}^2$   
5.  $46 \text{ ft}^2$     6.  $24 \text{ m}^2$     7.  $180 \text{ yd}^2$     8.  $20 \text{ mm}^2$

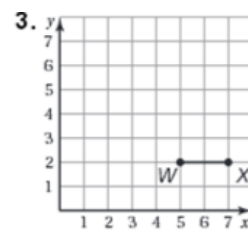
4.4 Practice A



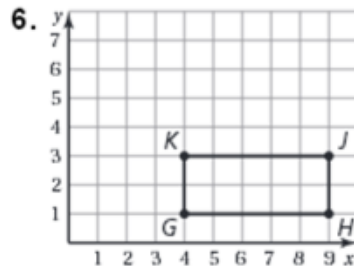
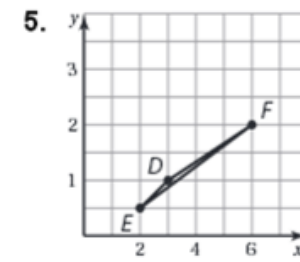
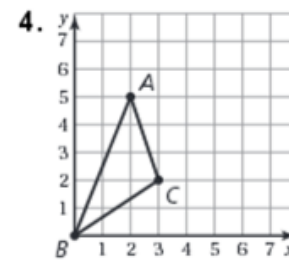
5 units



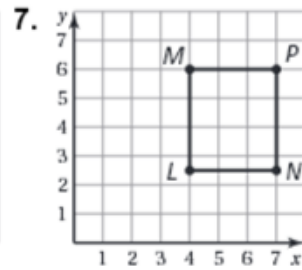
2 units



2 units



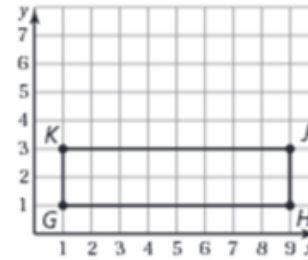
8. 18 units; 14 units<sup>2</sup>



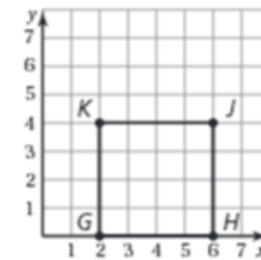
9. 16 units; 16 units<sup>2</sup>

10. a. triangle b. 16 yd<sup>2</sup>

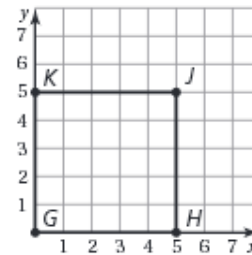
11. Sample answer:



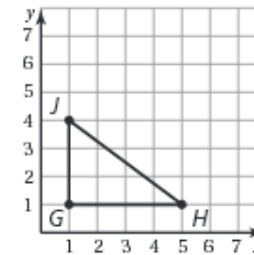
12. Sample answer:



13. Sample answer:



14. Sample answer:



15.  $D(10, 2); E(6, 10)$