4.2 Practice pg. 156-157 #3-15 odd (ANSWERS WITH WORK)

Practice and Problem Solving

3. $A = \frac{1}{2}bh$

$= \frac{1}{2}(3)(4)$

$= \frac{1}{2}(12)$

$= 6$

The area of the triangle is 6 square centimeters.

4. $A = \frac{1}{2}bh$

$= \frac{1}{2}(16)(5)$

$= \frac{1}{2}(80)$

$= 40$

The area of the triangle is 40 square feet.

5. $A = \frac{1}{2}bh$

$= \frac{1}{2}(60)(54)$

$= \frac{1}{2}(3240)$

$= 1620$

The area of the triangle is 1620 square inches.

6. $A = \frac{1}{2}bh$

$= \frac{1}{2}(14)(22)$

$= \frac{1}{2}(308)$

$= 154$

The area of the triangle is 154 square yards.

7. $A = \frac{1}{2}bh$

$= \frac{1}{2}(30)(75)$

$= \frac{1}{2}(2250)$

$= 1125$

The area of the triangle is 1125 square centimeters.

8. $A = \frac{1}{2}bh$

$= \frac{1}{2}(33)(8)$

$= \frac{1}{2}(264)$

$= 132$

The area of the triangle is 132 square meters.

9. The side length 13 meters was used instead of the height.

$A = \frac{1}{2}(10)(12)$

$= 60 \text{ m}^2$

10. Use the formula for the area of a triangle to estimate the area of the cottonwood leaf.

$A = \frac{1}{2}bh$

$= \frac{1}{2}(4)(5)$

$= 10$

The area of the cottonwood leaf is about 10 square inches.

11. $A = \frac{1}{2}bh$

$= \frac{1}{2}(36)(18)$

$= 324$

The area of the shelf is 324 square centimeters.

12. $A = \frac{1}{2}bh$

$= \frac{1}{2}(17)(8)$

$= 68$

The area of the triangle is 68 square meters.

13. $A = \frac{1}{2}bh$

$= \frac{1}{2}(20)(9)$

$= 90$

The area of the triangle is 90 square miles.

14. $A = \frac{1}{2}bh$

$= \frac{1}{2}(18)(21)$

$= 189$

The area of the triangle is 189 square millimeters.

15. *Sample answer:*