

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

Practice and Problem Solving

$$\begin{aligned} 3. \quad A &= bh \\ &= 6(3) \\ &= 18 \end{aligned}$$

The area of the parallelogram is 18 square feet.

$$\begin{aligned} 4. \quad A &= bh \\ &= 20(42) \\ &= 840 \end{aligned}$$

The area of the parallelogram is 840 square millimeters.

$$\begin{aligned} 5. \quad A &= bh \\ &= 17(11) \\ &= 187 \end{aligned}$$

The area of the parallelogram is 187 square kilometers.

$$\begin{aligned} 6. \quad A &= bh \\ &= 75(50) \\ &= 3750 \end{aligned}$$

The area of the parallelogram is 3750 square centimeters.

$$\begin{aligned} 7. \quad A &= bh \\ &= 13.5(18) \\ &= 243 \end{aligned}$$

The area of the parallelogram is 243 square inches.

$$\begin{aligned} 8. \quad A &= bh \\ &= 37\frac{1}{4}(24) \\ &= 894 \end{aligned}$$

The area of the parallelogram is 894 square miles.

9. The height of the parallelogram is not 15 meters.
The height is 13 meters.

$$\begin{aligned} A &= bh \\ &= 8(13) \\ &= 104 \end{aligned}$$

The area of the parallelogram is 104 square meters.

$$\begin{aligned} 10. \quad A &= bh \\ &= 4(1.5) \\ &= 6 \end{aligned}$$

The area of the tile is 6 square inches.

$$\begin{aligned} 11. \quad A &= bh \\ &= 6(2) \\ &= 12 \end{aligned}$$

The area of the parallelogram is 12 square units.

$$\begin{aligned}
 12. \quad A &= bh \\
 &= 3(3) \\
 &= 9
 \end{aligned}$$

The area of the parallelogram is 9 square units.

$$\begin{aligned}
 13. \quad A &= bh \\
 &= 8(3) \\
 &= 24
 \end{aligned}$$

The area of the parallelogram is 24 square units.

$$\begin{aligned}
 14. \quad \text{Area of shaded region} &= \text{Area of parallelogram} - \text{Area of rectangle} \\
 &= 10(7) - 3(2) \\
 &= 70 - 6 \\
 &= 64
 \end{aligned}$$

The area of the shaded region is 64 square centimeters.

$$\begin{aligned}
 15. \quad \text{Area of shaded region} &= \text{Area of larger parallelogram} - \text{Area of smaller parallelogram} \\
 &= 8(12) - 4(6) \\
 &= 96 - 24 \\
 &= 72
 \end{aligned}$$

The area of the shaded region is 72 square meters.