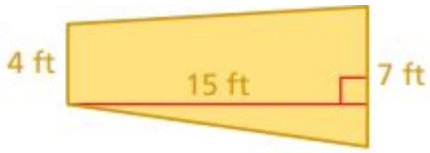
Name _____ Core ____ Date _____

4.3 Exercises

Check It Out
Help with Homework
BigIdeasMath.com

Vocabulary and Concept Check

1. VOCABULARY Identify the bases and the height of the trapezoid.



Base 1: _____ Base 2: _____ Height: _____

2. REASONING What measures do you need to find the area of a trapezoid?

_____

_____

_____

3. WHICH ONE DOESN'T BELONG? Which one does *not* belong with the other three? Explain your reasoning.

$\frac{1}{2}bh$ $\quad \ell w \quad$ $2\ell + 2w$ $\quad \frac{1}{2}h(b_1 + b_2)$

_____

_____

_____

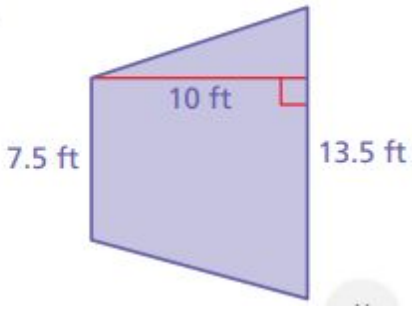
Practice and Problem Solving

Find the area of the trapezoid.

8.

_____

9.



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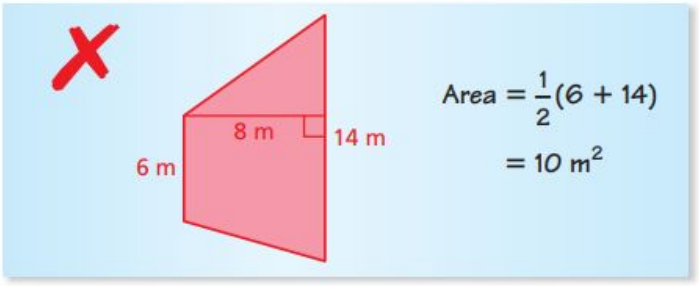
10. ERROR ANALYSIS Describe and correct the error in finding the area of the trapezoid.



_____

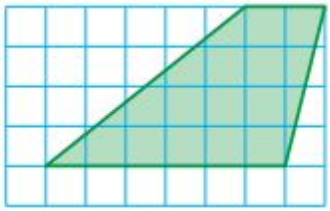
_____

_____

_____

Find the area of the trapezoid.

12.



_____

Find the area of a trapezoid with height h and bases b_1 and b_2.

16. $h = 22$ cm

$b_1 = 10.5$ cm

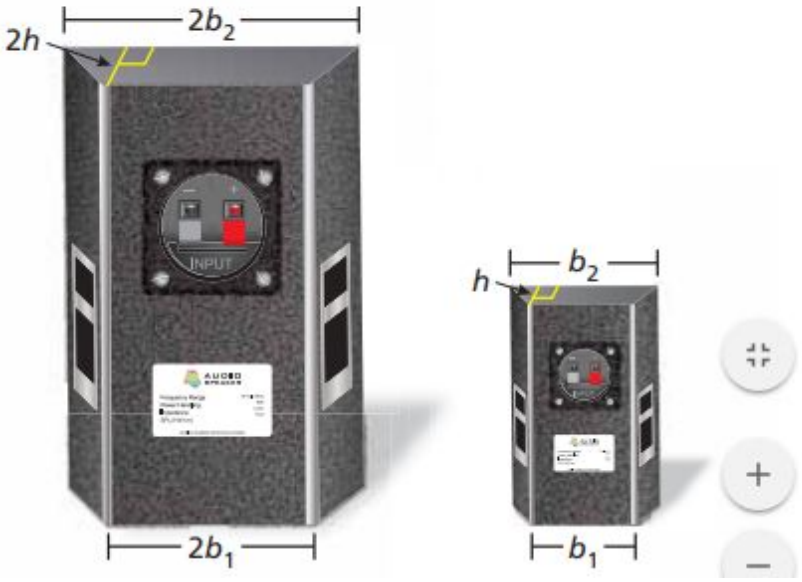
$b_2 = 12.5$ cm

_____

19. **REASONING** The rectangle and the trapezoid have the same area. What is the length ℓ of the rectangle?

_____

21. **AUDIO** How many times greater is the area of the floor covered by the larger speaker than by the smaller speaker?



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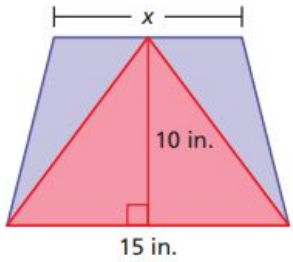
22. Critical Thinking The triangle and the trapezoid share a 15-inch base and a height of 10 inches.



a. The area of the trapezoid is less than twice the area of the triangle. Find the values of x. Explain your reasoning.

b. Can the area of the *trapezoid* be exactly twice the area of the triangle? Explain your reasoning.

a. _____

_____

_____

_____

b. _____

_____

_____

_____

Fair Game Review What you learned in previous grades & lessons

Plot the ordered pair in a coordinate plane. *(Skills Review Handbook)*

23. (5, 0) **24.** (2, 4) **25.** (0, 3) **26.** (6, 1)

27. **MULTIPLE CHOICE** Which expression represents "6 more than x"? *(Section 3.2)*

(A) $6 - x$ (B) $6x$ (C) $x + 6$ (D) $\frac{6}{x}$

Do 23 -26 on your grid and label the ordered pair.