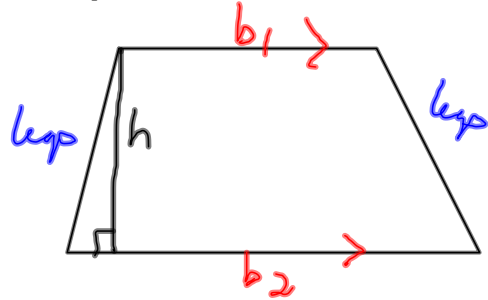


Trapezoid: A quadrilateral with 1 pair of parallel sides.

Bases (b_1 & b_2) are the parallel sides

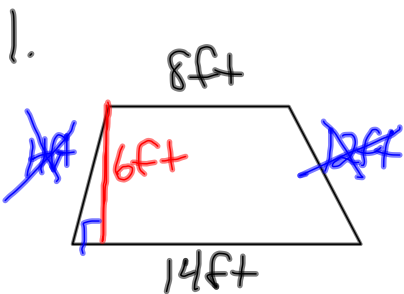
Legs: the non parallel sides

Height: the perpendicular distance between the bases.

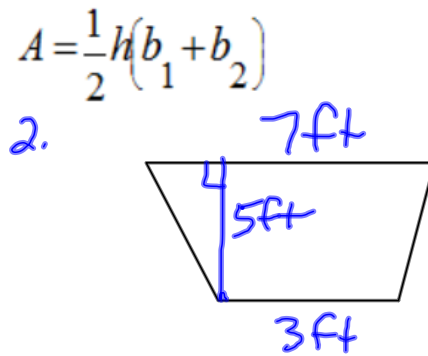


Mar 26-8:15 AM

Find the area of the trapezoid.



$$A = \frac{1}{2}(6)(8+14)$$
$$3(22)$$
$$66 \text{ ft}^2$$

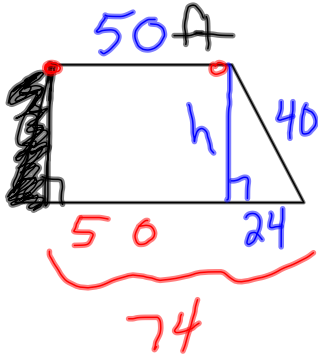


$$A = \frac{1}{2}(5)(7+3)$$
$$2.5(10)$$
$$25 \text{ ft}^2$$

Mar 26-8:12 AM

Find the area of the trapezoid.

3.



$$h^2 + 24^2 = 40^2$$

$$h^2 = 1024$$

$$h = 32$$

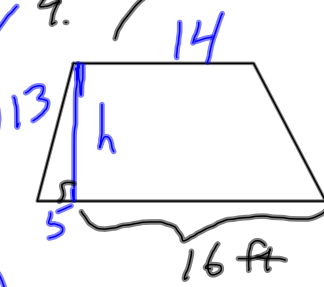
$$A = \frac{1}{2}(32)(50 + 74)$$

$$16(124)$$

$$1984 \text{ ft}^2$$

$$A = \frac{1}{2}h(b_1 + b_2)$$

4.



$$h^2 + 5^2 = 13^2$$

$$h^2 = 144$$

$$h = 12$$

$$A = \frac{1}{2}(12)(14 + 22)$$

$$6(36)$$

$$210 \text{ ft}^2$$

Mar 26-8:12 AM

If A is the area of the trapezoid, find the missing dimension.

$$A = 115 \text{ ft}^2$$

$$A = \frac{1}{2}h(b_1 + b_2)$$

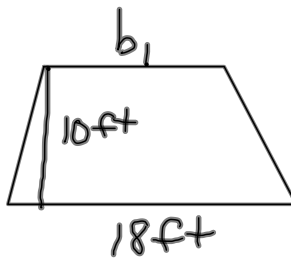
$$115 = \frac{1}{2}(10)(b_1 + 18)$$

$$\frac{115}{5} = \frac{10}{10}(b_1 + 18)$$

$$23 = b + 18$$

$$\begin{array}{r} 23 = b + 18 \\ -18 \quad -18 \\ \hline \end{array}$$

$$5 = b$$



Mar 26-8:18 AM

If A is the area of the trapezoid, find the missing dimension.

$$A = 130 \text{ in}^2$$

$$A = \frac{1}{2}h(b_1 + b_2)$$

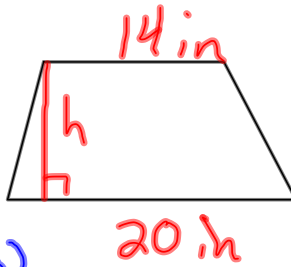
$$130 = \frac{1}{2}h(14 + 20)$$

$$130 = \frac{1}{2}h(34)$$

$$130 = 17h$$

$$\frac{130}{17} = \frac{17h}{17}$$

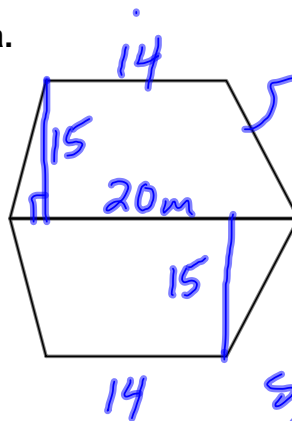
$$7.6 = h$$



Mar 26-8:18 AM

Find the combined area.

1.



$$A = \frac{1}{2}(15)(14 + 20)$$

$$= 7.5(34)$$

$$= 255$$

same dimensions

$$255(2)$$

$$510 \text{ m}^2$$

Mar 26-8:19 AM

Find the combined area.

Trap + rec.

$$\frac{1}{2}(10)(10+20) + 18(20)$$
$$5.5(30)$$

10 in

18 in

20 in

29 in

$h=11$

165 + 360

525 in²

Mar 26-8:20 AM

P. 448-450

2-14, 18-33

* 1st Q4 assignment

Mar 26-8:21 AM