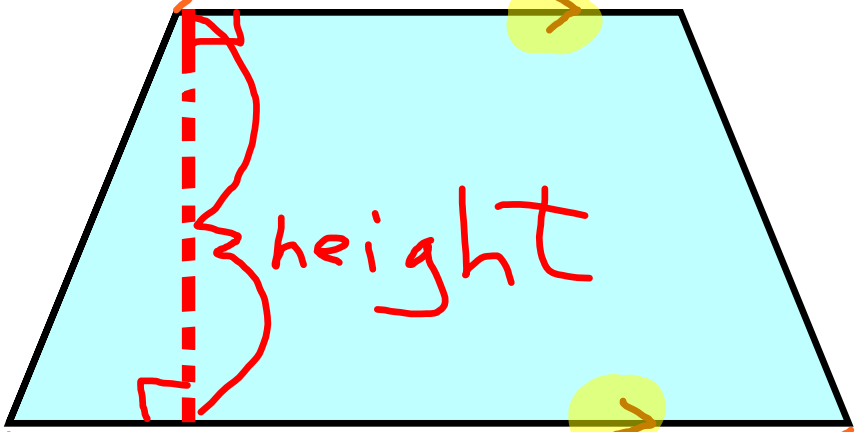
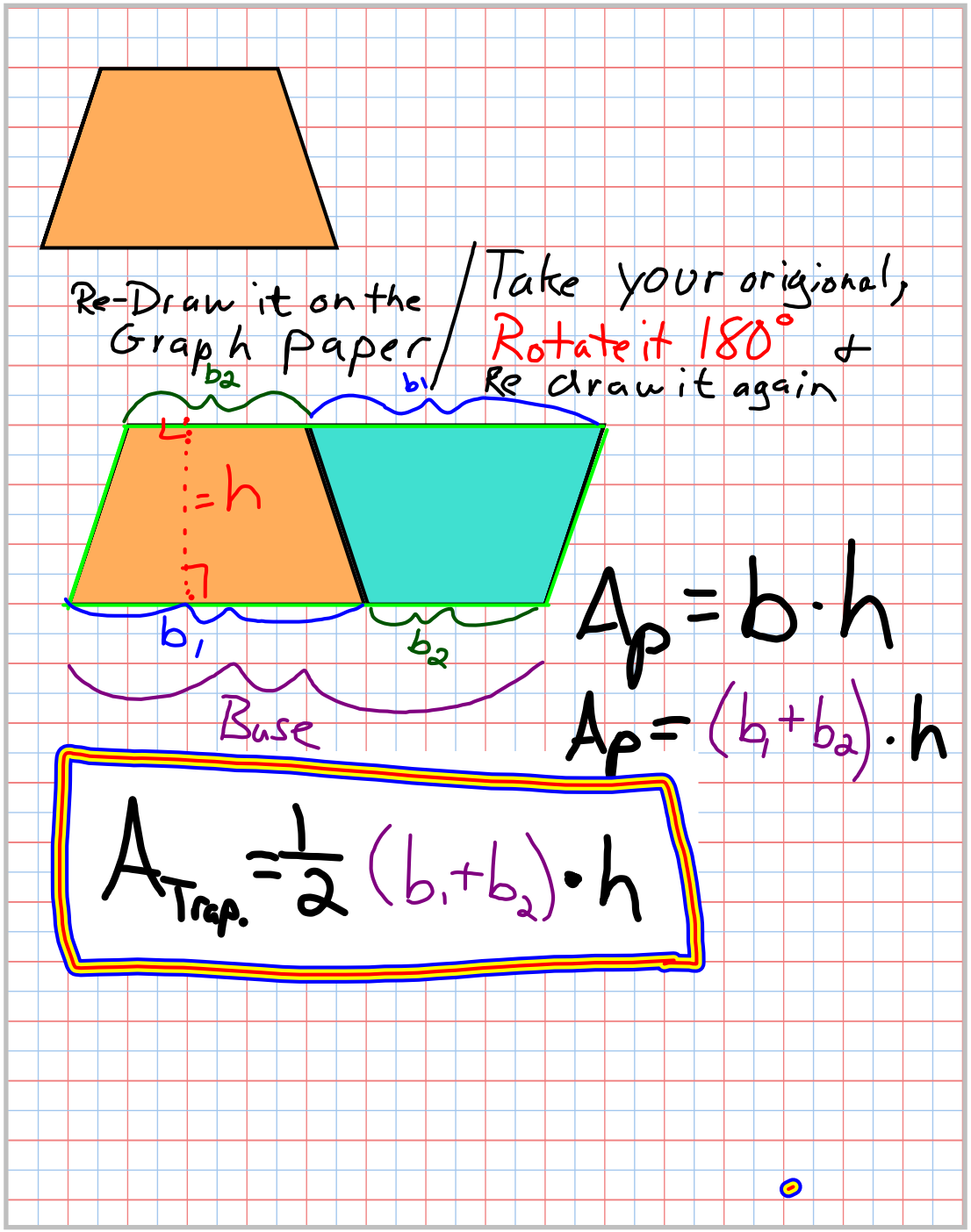
8.4 Area of a Trapezoid

May 01, 2007

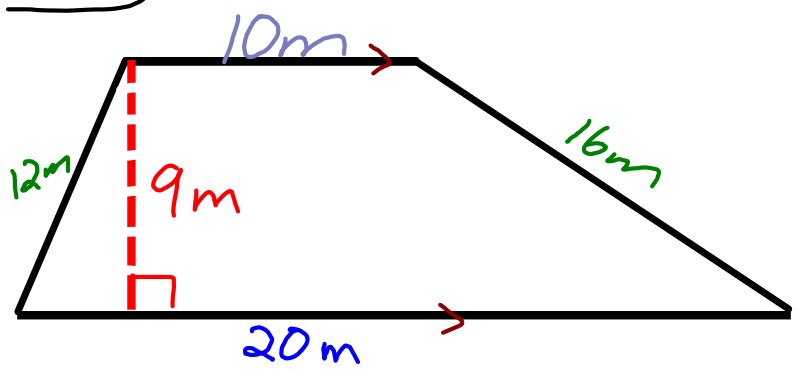


- 2 Parallel Sides
  - Are known as the Bases
- Height



Title: Mar 27 - 9:57 AM (2 of 5)

ex1)



$$A_{Trap} = \frac{1}{2}(b_1 + b_2) \cdot h$$

$$= \frac{1}{2}(20m + 10m) \cdot 9m$$

$$= \frac{1}{2}(30m) \cdot 9m$$

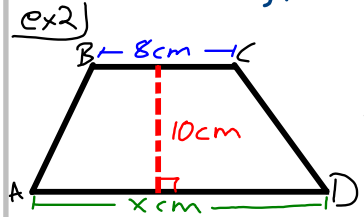
$$= 135\,m^2$$

$\frac{1}{2}$ 30
= 15

4
15
9
135

Suppose the Area is $115\ cm^2$
find 'x'

ex2)



$$A_{trap} = \frac{1}{2}(b_1 + b_2) \cdot h$$

$115\ cm^2 = \frac{1}{2}(x\ cm + 8\ cm) \cdot 10\ cm$

$\frac{115}{5} = \frac{5}{5}$

$23 =$ ☺

$\frac{115\ cm^2}{5\ cm} = \frac{5\ cm\,(x\ cm + 8\ cm)}{5\ cm}$

$\frac{x^2}{x} = \frac{x \cdot x}{x} = x$

$23\ cm = x\ cm + 8\ cm$

$23 = x + 8$

$-8 \quad -8$

$15 = x$

$-8\ cm \quad -8\ cm$

$15\ cm = x\ cm$

Title: Mar 27 - 10:18 AM (4 of 5)

O.T.L.

① pg 255: written 1, 5, 11, 13–18(all)