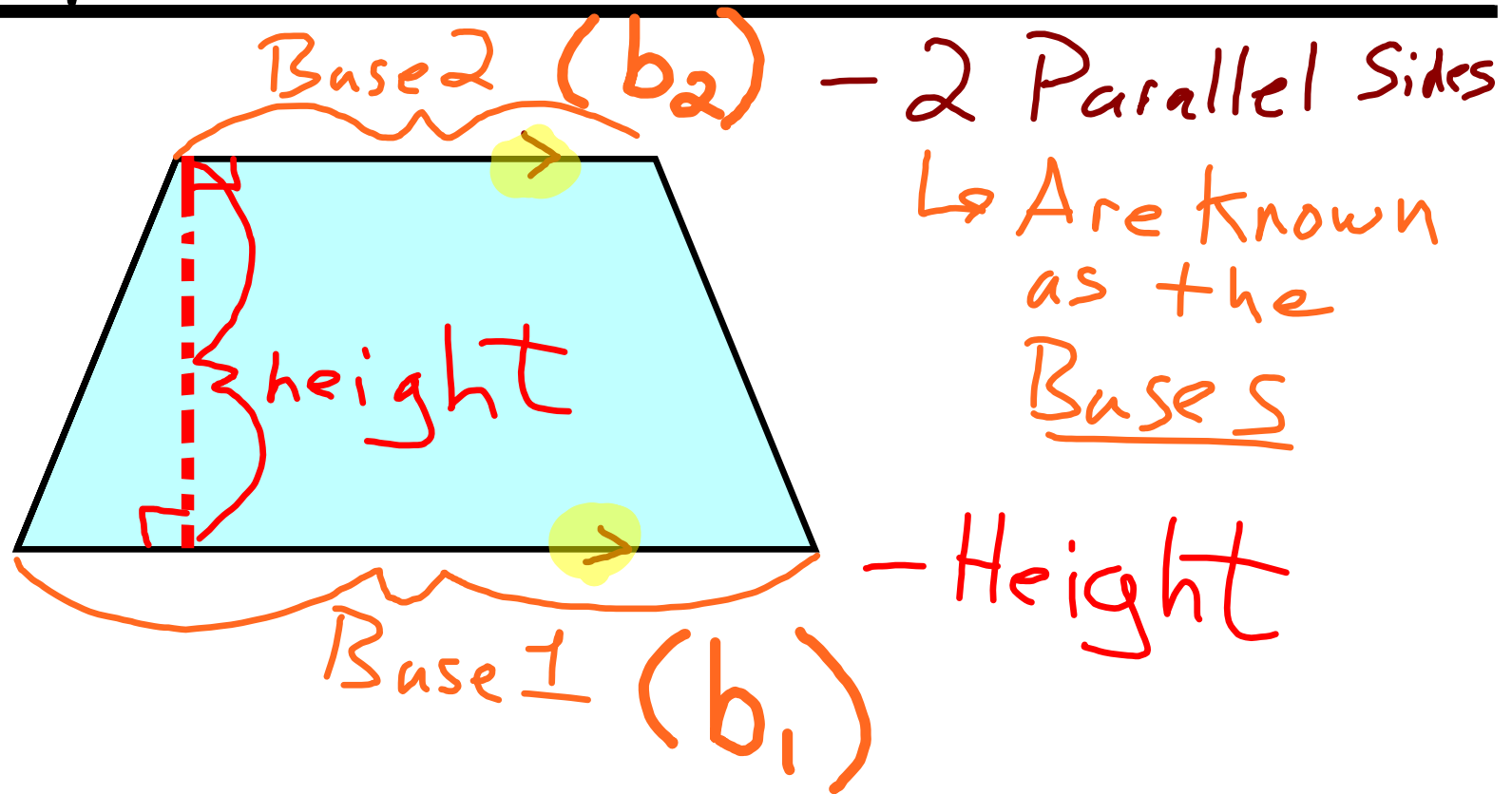
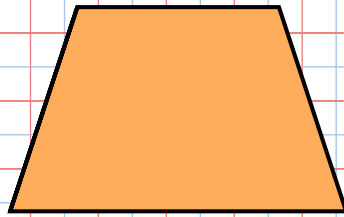


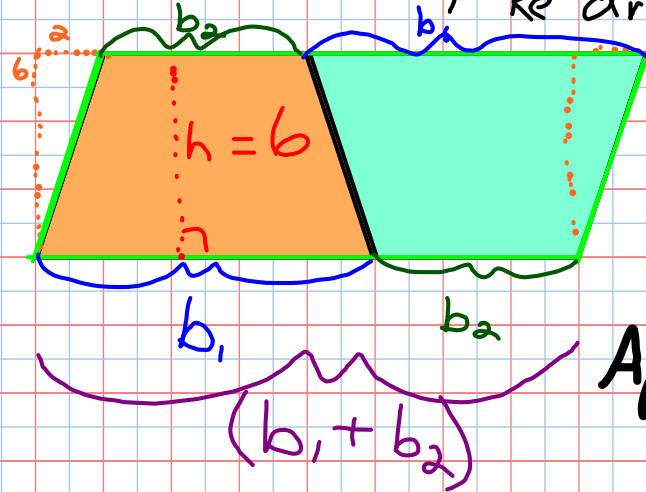
8.4 Area of a Trapezoid

May 01, 2007





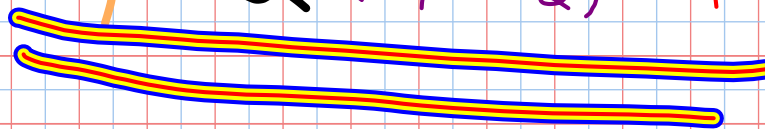
Re-Draw it on the Graph Paper / Take your original,
Rotate it 180° &
Re draw it again



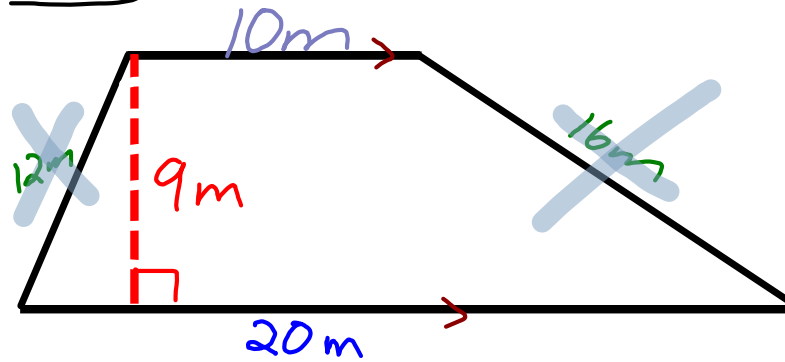
$$A_p = b \cdot h$$

$$A_p = (b_1 + b_2) \cdot h$$

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

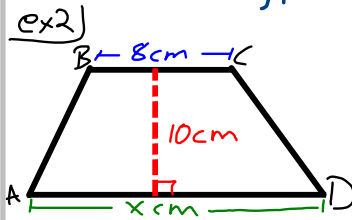


ex1)



$$\begin{aligned} A_T &= \frac{1}{2} (b_1 + b_2) \cdot h \\ &= \frac{1}{2} (20m + 10m) \cdot 9m \\ &= \frac{1}{2} (30m) \cdot 9m \\ &= 135m^2 \end{aligned}$$

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



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

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

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

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

$$23 = \text{😊}$$

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

$$23 = x + 8$$

$$\begin{array}{r} 23 = x + 8 \\ -8 \quad -8 \\ \hline 15 = x \end{array}$$

$$23 \text{ cm} = x \text{ cm} + 8 \text{ cm}$$

$$\begin{array}{r} 23 \text{ cm} = x \text{ cm} + 8 \text{ cm} \\ -8 \text{ cm} \quad -8 \text{ cm} \\ \hline 15 \text{ cm} = x \text{ cm} \end{array}$$

$$\underline{\underline{15 \text{ cm} = x \text{ cm}}}$$

O.T.L.

① pg 255: ^{written} 1, 5, 11, 13-18 (all)