

Name:

#### 4.4 Classwork: Using GraspableMath for area and volume calculations

1. Do Now: Find the area of a triangle with base  $b = 12.5$  and height  $h = 8.4$ . Use the Graspable Math activity linked above. Paste a cropped screenshot of the first problem here. It should look like the modelled solution below.

- ☐ Copy expressions (drag the handle on the left of the formula)
- ☐ Substitute values (drag the variable onto the formula)
- ☐ Show/hide steps (show the substitution, final line, and key steps)
- ☐ Copy/paste screenshot: command-control-shift-4 (Mac)

$$\begin{array}{l} b = 12.5 \\ h = 8.4 \\ A = \frac{1}{2}bh \end{array} \quad \begin{array}{l} A = \frac{1}{2}(12.5)(8.4) \\ A = 52.5 \end{array}$$

↖ Show substitution step in copy of formula.

2. Find the area of a semi-circle with radius  $r = 7.5$ . Paste a cropped screenshot of the Graspable Math. Compare your format to the model solution.

Find the density of Queens given its area and population.  
(Drag values to substitute)

$$A = 108.1 \quad P = 2358582$$

$$D = \frac{P}{A} \quad D = \frac{(2358582)}{(108.1)}$$

$$D = 21818.52$$

3.

4. Find the population density of Queens, New York. Paste a cropped screenshot of the Graspable Math. Make a copy of the formula and show the substitution step.

Find the density of Queens given its area and population.  
(Drag values to substitute)

$$A = 108.1 \quad P = 2358582$$

$$D = \frac{P}{A} \quad D = \frac{(2358582)}{(108.1)}$$

$$D = 21818.52$$