

# Dimensional analysis #1

Name \_\_\_\_\_

## Show all set-ups!!

Given the following information:

$$1 \text{ quark} = 2.9 \text{ whos}$$

$$1 \text{ whos} = 5 \text{ mabees}$$

$$1 \text{ bug} = 3.7 \text{ quarks}$$

$$1 \text{ kuz} = 3.2 \text{ mabees}$$

Change:

1.) 3.0 quark to bug 1. \_\_\_\_\_

2.) 1.3 mabees to quarks 2. \_\_\_\_\_

3.) 7.0 whos to bugs 3. \_\_\_\_\_

4.) 8.75 kuz to quarks 4. \_\_\_\_\_

5.) 2.5 bug to kuz 5. \_\_\_\_\_

6.)  $2.0 \times 10^{-3}$  quarks to mabees 6. \_\_\_\_\_

7.) 900. quarks to whos 7. \_\_\_\_\_

8.)  $4.8 \times 10^5$  kuz to mabees 8. \_\_\_\_\_

9.) 205 mabees to whos 9. \_\_\_\_\_

10.) 15 bug<sup>2</sup> to quarks<sup>2</sup> (see note at bottom) 10. \_\_\_\_\_

11.) 2.5 mabees<sup>2</sup> to kuz<sup>2</sup> 11. \_\_\_\_\_

12.)  $1.50 \times 10^3$  kuz<sup>2</sup> to bug<sup>2</sup> 12. \_\_\_\_\_

For squared conversion factors, write the conversion factor you think you need, put it in parentheses, and then square it. Both the numerical value and the units will end out being squared.