

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.) 2.0×10^{-3} quarks to mabees 6. _____

7.) 900. quarks to whos 7. _____

8.) 4.8×10^5 kuz to mabees 8. _____

9.) 205 mabees to whos 9. _____

10.) 15 bug² to quarks² (see note at bottom) 10. _____

11.) 2.5 mabees² to kuz² 11. _____

12.) 1.50×10^3 kuz² to bug² 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.