

Perform each of the following unit conversions using the technique shown to you in class (multiply by conversion factors). Your teacher will help you with conversion factors. Be sure to include units in your answers.

1. Convert 2.4 ft to in.
2. Convert 3.2 yd to in.
3. Convert 540 in to ft.
4. Convert 34 in to cm.
5. Convert 1.5 N/m to lb/in.
6. Convert 25 in<sup>2</sup> to cm<sup>2</sup>
7. Convert 25 mi/hr to ft/s
8. Convert 43 lb/in<sup>2</sup> to lb/ft<sup>2</sup>
9. Your friend has a 14 cm<sup>2</sup> chocolate brownie. You have a 2 in<sup>2</sup> brownie. Whose brownie is bigger?
10. Joe claims that he can run 12 mi/hr. Sally claims she can run 1,000,000 ft/day. Who can run faster?
11. How many square centimeters are there on an 8.5in x 11in piece of paper?
12. Would you rather have 500N of gold or 100lb of gold?
13. Object A has a density of 36g/cm<sup>3</sup>. Object B has a density of 1.5lb/in<sup>3</sup>. Which one is more dense?