Name: ....   Class: ....

Customary unit conversions involving fractions and mixed numbers.

Convert the following expressions below simplify your answer and write it as a proper fracton or as a whole or mixed number.

1.   18 inches = _____ yards

2.   _____ ounces = $\dfrac{1}{8}$ of a pound

3.   _____ pint = 16 quarts

4.   64 cups = _____ quarts

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Customary unit conversions involving fractions and mixed numbers.

Convert the following expressions. Simplify your answer and write it as a proper fraction, whole or mixed number.

1. 18 inches = _____ yards

here, we are converting a smaller unit to a bigger unit, so we have to divide.

36 inches is equal to 1 yard

therefore, 18 inches = $\dfrac{18 \text{ inches} \times 1 \text{ yard}}{36 \text{ inches}}$

$= \dfrac{18}{36} = \dfrac{1}{2}$ yard

2. _____ ounces = $\dfrac{1}{8}$ of a pound

if 1 pound = 16 ounces

therefore, $\dfrac{1}{8}$ pound = $\dfrac{16 \text{ ounces} \times \dfrac{1}{8} \text{ pound}}{1 \text{ pound}}$

$= \dfrac{16 \text{ ounces}}{8} = 2 \text{ ounces}$

3. _____ pint = 16 quarts

if 1 quart = 2 pints

therefore, 16 quarts = $\dfrac{16 \text{ quarts} \times 2 \text{ pints}}{1 \text{ quart}}$

$= (16 \times 2)$ pints = 32 pints

4. 64 cups = _____ quarts

if 1 cup = 0.25 quarts

therefore, 64 cups = $\dfrac{64 \text{ cups} \times 0.25 \text{ quart}}{1 \text{ cup}}$

$= (64 \times 0.25)$ quart = 16 quarts

So, 64 cups = 16 quarts.