Algebra 1 Bellwork Monday, January 26, 2015

Round answers to the nearest hundredth when needed.

1. You can paddle a canoe 4 mph when the water is still, i.e. on a pond. You are camping along a river whose current is 2mph.

a) If you paddle downstream (traveling with the current) how fast will your canoe be able to go?

b) If you paddle downstream 3 miles to a new fishing spot how long will it take?

c) If you paddle upstream (traveling against the current) how fast will your canoe be able to go?

d) If you paddle upstream from the fishing spot back to your campsite, how long will it take?

2. There are two "sports" drinks in front of you: Powerhelp and Crocade.

a) Powerhelp contains 8% fructose by volume. How many ounces of fructose are there in a 24 ounce bottle of this drink?

b) Crocade contains 6% fructose by volume. How many ounces of fructose are there in a 20 ounce bottle of this drink?

c) You mixed these two bottles together:

i) How many ounces of fructose are there in this mixture?

ii) What percent of the 44 ounces of this mixture is fructose?

ANSWERS

Algebra 1 Bellwork Monday, January 26, 2015

Round answers to the nearest hundredth when needed.

1. You can paddle a canoe 4 mph when the water is still, i.e. on a pond. You are camping along a river whose current is 2mph.

a) If you paddle downstream (traveling with the current) how fast will your canoe be able to go?

$4\text{mph} + 2\text{mph} =$ 6mph

b) If you paddle downstream 3 miles to a new fishing spot how long will it take?

$d = rt$

$3\text{mi} = 6\text{mph} \cdot t$

$t = \frac{3\text{mi}}{6\text{mph}} =$ ½ hour

c) If you paddle upstream (traveling against the current) how fast will your canoe be able to go?

$4\text{mph} - 2\text{mph} =$ 2mph

d) If you paddle upstream from the fishing spot back to your campsite, how long will it take?

$d = rt$

$3\text{mi} = 2\text{mph} \cdot t$

$t = \frac{3\text{mi}}{2\text{mph}} =$ 1½ hrs

2. There are two "sports" drinks in front of you: Powerhelp and Crocade.

a) Powerhelp contains 8% fructose by volume. How many ounces of fructose are there in a 24 ounce bottle of this drink?

8% of 24 → $(.08)(24) =$ 1.92 oz

b) Crocade contains 6% fructose by volume. How many ounces of fructose are there in a 20 ounce bottle of this drink?

6% of 20 $= (.06)(20) =$ 1.2 oz

c) You mixed these two bottles together:

i) How many ounces of fructose are there in this mixture?

$1.92 + 1.2 =$ 3.12 oz

ii) What percent of the 44 ounces of this mixture is fructose?

% fructose $\frac{3.12}{44} \cdot 100 =$ 7.09 %