

Practice for Quiz 4 - Work and Mixture Problems

Date_____ Period_____

Solve each question. Round your answer to the nearest hundredth.

- 1) James can weed a garden in 10 minutes. Norachai can weed the same garden in 11 minutes. How long would it take them if they worked together?
- 2) Working alone, Elisa can sweep a porch in 11 minutes. Chelsea can sweep the same porch in 9 minutes. If they worked together how long would it take them?
- 3) Abhasra can pick forty bushels of apples in 11 hours. Krystal can pick the same amount in 12 hours. How long would it take them if they worked together?
- 4) It takes Brenda 14 hours to pick forty bushels of apples. Maria can pick the same amount in 11 hours. If they worked together how long would it take them?
- 5) It takes Jaidee 15.8 hours to tar a roof. Totsakan can tar the same roof in 13.3 hours. How long would it take them if they worked together?
- 6) Asanji can sweep a porch in 13.8 minutes. Molly can sweep the same porch in 11.8 minutes. Find how long it would take them if they worked together.
- 7) 4 yd³ of silt was mixed into 5 yd³ of soil containing 28% silt. What is the silt content of the mixture?
- 8) 2 L of a 35% saline solution was mixed with 8 L of a 70% saline solution. What is the concentration of the mixture?
- 9) How much sand do you need to add to 6 ft³ of soil with 35% sand in order to make a soil with 61% sand?
- 10) How many kg of copper which costs \$2/kg must be added to 3 kg of tin which costs \$7/kg to make bronze which costs \$3/kg?
- 11) Chelsea mixed together 4 gal. of Brand A fruit drink and 2 gal. of Brand B fruit drink which contains 5% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 35% fruit juice.
- 12) Daniel created a metal containing 25% copper by combining two other metals. One of these other metals weighed 6 kg and contained 43% copper. If the other weighed 12 kg then what percent of it was copper?
- 13) Eduardo wants to make 16 qt. of a 75% saline solution by mixing together a 50% saline solution and a 90% saline solution. How much of each solution must he use?
- 14) A metallurgist needs to make 15 lb. of an alloy containing 9% nickel. He is going to melt and combine one metal that is 5% nickel with another metal that is 10% nickel. How much of each should he use?
- 15) A metallurgist needs to make 15 lb. of an alloy containing 46% copper. She is going to melt and combine one metal that is 26% copper with another metal that is 51% copper. How much of each should she use?
- 16) Baking flour which costs \$5/oz is made by combining bleached flour which costs \$7/oz with unbleached flour which costs \$3/oz. Find the number of oz of bleached flour and unbleached flour required to make 6 oz of baking flour.