Name_____

Assignment

Date_____ Period____

1) 2 gal. of a sugar solution was mixed with 8 gal. of a 60% sugar solution to make a 65% sugar solution. Find the percent concentration of the first solution.

2) Perry mixed together 8 gal. of Brand A fruit drink and 9 gal. of Brand B fruit drink which contains 56% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 40% fruit juice.

3) 3 ml of a sugar solution was mixed with 1 ml of a 56% sugar solution to make a 65% sugar solution. Find the percent concentration of the first solution.

4) Ted mixed together 3 gal. of Brand A fruit drink and 9 gal. of Brand B fruit drink which contains 44% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 36% fruit juice.

5) How many oz. of mixed nuts that contain 30% peanuts must Maria add to 6 oz. of peanuts to make a mixture with 72% peanuts?

6) How many lbs. of mixed nuts that contain 55% peanuts must Lea add to 12 lbs. of mixed nuts that contain 20% peanuts to make a mixture with 35% peanuts?

7) How many lbs. of mixed nuts that contain 60% peanuts must Emily add to 18 lbs. of mixed nuts that contain 20% peanuts to make a mixture with 30% peanuts?

8) Ashley made a nut mixture that contains 35% peanuts by mixing together 8 lbs. of mixed nuts that contain 20% peanuts and 12 lbs. of a different brand of mixed nuts. The second brand of mixed nuts contained what percent peanuts?

9) Chelsea and her brother mixed together two types of soil to make 10 m³ of soil with a 34% clay content. They used 8 m³ of a soil with 30% clay content and 2 m³ of another type of soil. What was the clay content of the second type of soil?

10) 3 ml of an alcohol solution was mixed with 6 ml of pure water to make a 5% alcohol solution. Find the percent concentration of the first solution.

11) How many kg of mixed nuts that contain 40% peanuts must Dan add to 6 kg of mixed nuts that contain 70% peanuts to make a mixture with 49% peanuts?

12) Carlos created a metal containing 96% copper by combining 12 mg of pure copper with 3 mg of another metal. What percent of the other metal was copper?

13) How many lb. of a metal containing 90% platinum must be combined with 5 lb. of a metal containing 62% platinum to form an alloy containing 80% platinum?

14) How many lb of soybean oil which costs $1/lb must be added to 1 lb of canola oil which costs $4/lb to make vegetable oil which costs $2/lb?

15) How many kg of a metal containing 60% copper must be combined with 12 kg of a metal containing 10% copper to form an alloy containing 20% copper?

16) Kathryn wants to make a 18% alcohol solution. She has already poured 8 fl. oz. of a 12% alcohol solution into a beaker. How many fl. oz. of a 66% alcohol solution must she add to this to create the desired mixture?

17) Arjun wants to make a 76% sugar solution. He has already poured 4 gal. of a 70% sugar solution into a beaker. How many gal. of a 78% sugar solution must he add to this to create the desired mixture?

18) 9 gal. of a saline solution was mixed with 1 gal. of a 55% saline solution to make a 37% saline solution. Find the percent concentration of the first solution.

19) 9 ml of an acid solution was mixed with 5 ml of a 80% acid solution to make a 35% acid solution. Find the percent concentration of the first solution.

20) Totsakan wants to make a 60% sugar solution. He has already poured 2 L of pure water into a beaker. How many L of a 80% sugar solution must he add to this to create the desired mixture?

21) How many oz. of mixed nuts that contain 30% peanuts must Heather add to 5 oz. of mixed nuts that contain 66% peanuts to make a mixture with 40% peanuts?

22) Wilbur wants to make a 30% alcohol solution. He has already poured 4 qt. of a 60% alcohol solution into a beaker. How many qt. of a 15% alcohol solution must he add to this to create the desired mixture?

23) How many lbs. of peanuts must Lisa add to 8 lbs. of mixed nuts containing 25% peanuts to make a mixture with 70% peanuts?

24) How many lb. of a metal containing 85% iron must be combined with 8 lb. of a metal containing 70% iron to form an alloy containing 73% iron?

Answers to Assignment (ID: 1)

1) 85%   2) 22%   3) 68%   4) 12%
5) 4 oz.   6) 9 lbs.   7) 6 lbs.   8) 45%
9) 50%   10) 15%   11) 14 kg   12) 80%
13) 9 lb.   14) 2 lbs   15) 3 kg   16) 1 fl. oz.
17) 12 gal.   18) 35%   19) 10%   20) 6 L
21) 13 oz.   22) 8 qt.   23) 12 lbs.   24) 2 lb.

Assignment

1) How many lbs. of mixed nuts that contain 29% peanuts must Amy add to 12 lbs. of mixed nuts that contain 45% peanuts to make a mixture with 41% peanuts?

2) How many kg of mixed nuts that contain 46% peanuts must Asanji add to 14 kg of mixed nuts that contain 28% peanuts to make a mixture with 32% peanuts?

3) How much soil with 24% silt do you need to add to 2 m³ of soil with 36% silt in order to make a soil with 26% silt?

4) Jill and her brother mixed together some soil and some sand to make 10 yd³ of soil with a 64% sand content. They used 6 yd³ of sand and 4 yd³ of a soil they purchased. What was the sand content of the soil they purchased?

5) Mark mixed together 8 gal. of Brand A fruit drink and 6 gal. of Brand B fruit drink which contains 42% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 26% fruit juice.

6) How much of Brand A fruit punch (10% fruit juice) must be mixed with 2 gal. of grape juice to create a mixture containing 30% fruit juice?

7) How much of Brand A fruit punch (7% fruit juice) must be mixed with 4 L of Brand B fruit punch (34% fruit juice) to create a mixture containing 19% fruit juice?

8) Jessica created a metal containing 44% iron by combining two other metals. One of these other metals weighed 2 kg and contained 68% iron. If the other weighed 3 kg then what percent of it was iron?

9) How much of Brand A fruit punch (50% fruit juice) must be mixed with 3 L of Brand B fruit punch (22% fruit juice) to create a mixture containing 38% fruit juice?

10) 2 fl. oz. of an acid solution was mixed with 5 fl. oz. of a 66% acid solution to make a 50% acid solution. Find the percent concentration of the first solution.

11) How many qt. of a 40% acid solution must be mixed with 1 qt. of pure water to make a 36% solution?

12) How many ml of a 25% sugar solution must be mixed with 11 ml of a 85% sugar solution to make a 80% solution?

13) 1 ml of an acid solution was mixed with 4 ml of a 60% acid solution to make a 50% acid solution. Find the percent concentration of the first solution.

14) 6 ml of a saline solution was mixed with 4 ml of a 80% saline solution to make a 77% saline solution. Find the percent concentration of the first solution.

15) 8 gal. of a sugar solution was mixed with 6 gal. of pure water to make a 40% sugar solution. Find the percent concentration of the first solution.

16) How many oz of walnuts which cost $9/oz must be added to 4 oz of peanuts which cost $2/oz to make mixed nuts which cost $5/oz?

17) How many oz. of a metal containing 10% copper must be combined with 8 oz. of pure copper to form an alloy containing 70% copper?

18) How much of Brand A fruit punch (40% fruit juice) must be mixed with 10 L of Brand B fruit punch (49% fruit juice) to create a mixture containing 46% fruit juice?

19) How many qt. of a 40% saline solution must be mixed with 6 qt. of a 10% saline solution to make a 28% solution?

20) How much of Brand A fruit punch (25% fruit juice) must be mixed with 2 L of apple juice to create a mixture containing 40% fruit juice?

21) How much soil with 50% sand do you need to add to 8 m³ of soil with 20% sand in order to make a soil with 26% sand?

22) How much soil with 18% clay do you need to add to 9 ft³ of soil with 50% clay in order to make a soil with 42% clay?

23) Mike mixed together 3 L of Brand A fruit drink and 7 L of Brand B fruit drink which contains 50% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 41% fruit juice.

24) Jimmy and his brother mixed together two types of soil to make 10 m³ of soil with a 38% clay content. They used 8 m³ of a soil with 40% clay content and 2 m³ of another type of soil. What was the clay content of the second type of soil?

Answers to Assignment (ID: 2)

1) 4 lbs.   2) 4 kg   3) 10 m³   4) 10%

5) 14%   6) 7 gal.   7) 5 L   8) 28%

9) 4 L   10) 10%   11) 9 qt.   12) 1 ml

13) 10%   14) 75%   15) 70%   16) 3 ozs

17) 4 oz.   18) 5 L   19) 9 qt.   20) 8 L

21) 2 m³   22) 3 ft³   23) 20%   24) 30%

Name_____

Assignment

Date_____ Period____

1) John mixed together 3 gal. of Brand A fruit drink and 9 gal. of Brand B fruit drink which contains 8% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 16% fruit juice.

2) Rob mixed together 3 gal. of Brand A fruit drink and 7 gal. of Brand B fruit drink which contains 8% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 11% fruit juice.

3) 11 ml of a sugar solution was mixed with 9 ml of a 70% sugar solution to make a 81% sugar solution. Find the percent concentration of the first solution.

4) Ndiba and his brother mixed together two types of soil to make 15 m³ of soil with a 40% clay content. They used 10 m³ of a soil with 50% clay content and 5 m³ of another type of soil. What was the clay content of the second type of soil?

5) 10 gal. of an acid solution was mixed with 2 gal. of a 40% acid solution to make a 15% acid solution. Find the percent concentration of the first solution.

6) How many gal. of a 50% saline solution must be mixed with 2 gal. of pure water to make a 40% solution?

7) How many fl. oz. of a 40% alcohol solution must be mixed with 8 fl. oz. of pure water to make a 24% solution?

8) Kim wants to make a 20% alcohol solution. She has already poured 7 fl. oz. of pure water into a beaker. How many fl. oz. of a 55% alcohol solution must she add to this to create the desired mixture?

9) 4 fl. oz. of an acid solution was mixed with 6 fl. oz. of a 69% acid solution to make a 59% acid solution. Find the percent concentration of the first solution.

10) What is the price per oz of walnuts if 2 oz were mixed with 8 oz of peanuts which cost $7/oz to make 10 oz of mixed nuts which cost $6/oz?

11) What is the price per oz of brand X coffee if 4 oz were mixed with 14 oz of brand Y coffee which costs $4/oz to make 18 oz of Eugene's special coffee blend which costs $8/oz?

12) Jasmine and her brother mixed together two types of soil to make 12 ft³ of soil with a 23% silt content. They used 9 ft³ of a soil with 18% silt content and 3 ft³ of another type of soil. What was the silt content of the second type of soil?

13) How much soil with 50% silt do you need to add to 6 ft³ of soil with 20% silt in order to make a soil with 32% silt?

14) Nicole mixed together 10 L of Brand A fruit drink and 6 L of grape juice. Find the percent of fruit juice in Brand A if the mixture contained 70% fruit juice.

15) How many gal. of a 55% saline solution must be mixed with 9 gal. of pure water to make a 10% solution?

16) How much soil with 40% sand do you need to add to 1 yd³ of soil with 50% sand in order to make a soil with 41% sand?

17) How much soil with 56% sand do you need to add to 5 yd³ of soil with 20% sand in order to make a soil with 44% sand?

18) How much clay do you need to add to 8 yd³ of soil with 28% clay in order to make a soil with 52% clay?

19) Willie mixed together 4 L of Brand A fruit drink and 2 L of grape juice. Find the percent of fruit juice in Brand A if the mixture contained 50% fruit juice.

20) Aliyah mixed together 10 L of Brand A fruit drink and 4 L of Brand B fruit drink which contains 55% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 40% fruit juice.

21) How many mg of a metal containing 20% gold must be combined with 9 mg of a metal containing 40% gold to form an alloy containing 38% gold?

22) How many kg of bleached flour which costs $3/kg must be added to 9 kg of unbleached flour which costs $7/kg to make baking flour which costs $6/kg?

23) Pranav created a metal containing 84% nickel by combining 5 oz. of pure nickel with 1 oz. of another metal. What percent of the other metal was nickel?

24) Norachai made a nut mixture that contains 83% peanuts by mixing 5 oz. of mixed nuts with 20 oz. of peanuts. The mixed nuts contained what percent peanuts?

Answers to Assignment (ID: 3)

1) 40% 2) 18% 3) 90% 4) 20%

5) 10% 6) 8 gal. 7) 12 fl. oz. 8) 4 fl. oz.

9) 44% 10) $2/oz 11) $22/oz 12) 38%

13) 4 ft³ 14) 52% 15) 2 gal. 16) 9 yd³

17) 10 yd³ 18) 4 yd³ 19) 25% 20) 34%

21) 1 mg 22) 3 kgs 23) 4% 24) 15%

Name_____

Assignment

Date_____ Period_____

1) Huong created a metal containing 16% iron by combining two other metals. One of these other metals weighed 6 mg and contained 10% iron. If the other weighed 3 mg then what percent of it was iron?

2) How many qt. of a 6% sugar solution must be mixed with 4 qt. of a 50% sugar solution to make a 22% solution?

3) Matt wants to make a 86% acid solution. He has already poured 12 qt. of a 90% acid solution into a beaker. How many qt. of a 80% acid solution must he add to this to create the desired mixture?

4) How many kg of brand X coffee which costs $25/kg must be added to 2 kg of brand Y coffee which costs $9/kg to make Jennifer's special coffee blend which costs $21/kg?

5) 3 fl. oz. of an alcohol solution was mixed with 2 fl. oz. of a 70% alcohol solution to make a 64% alcohol solution. Find the percent concentration of the first solution.

6) 12 kg of peanuts were mixed with 6 kg of spices which cost $1/kg to make Beth's Red Hot Peanuts which cost $3/kg. What is the price per kg of peanuts?

7) Kristin mixed together 8 L of Brand A fruit drink and 10 L of grape juice. Find the percent of fruit juice in Brand A if the mixture contained 76% fruit juice.

8) 2 kg of peanuts were mixed with 1 kg of spices which cost $4/kg to make Perry's Red Hot Peanuts which cost $2/kg. What is the price per kg of peanuts?

9) How many lb. of a metal containing 20% gold must be combined with 12 lb. of a metal containing 86% gold to form an alloy containing 56% gold?

10) Ted and his brother mixed together two types of soil to make 5 yd³ of soil with a 49% clay content. They used 1 yd³ of a soil with 45% clay content and 4 yd³ of another type of soil. What was the clay content of the second type of soil?

11) How many kg of a metal containing 60% silver must be combined with 8 kg of a metal containing 30% silver to form an alloy containing 36% silver?

12) How much soil with 25% clay do you need to add to 2 yd³ of soil with 40% clay in order to make a soil with 30% clay?

13) How much soil with 44% silt do you need to add to 2 m³ of soil with 26% silt in order to make a soil with 32% silt?

14) How much of Brand A fruit punch (20% fruit juice) must be mixed with 4 L of Brand B fruit punch (50% fruit juice) to create a mixture containing 32% fruit juice?

15) Ashley created a metal containing 41% platinum by combining two other metals. One of these other metals weighed 2 mg and contained 63% platinum. If the other weighed 11 mg then what percent of it was platinum?

16) Chelsea created a metal containing 55% nickel by combining 4 lb. of pure nickel with 6 lb. of another metal. What percent of the other metal was nickel?

17) How much of Brand A fruit punch (14% fruit juice) must be mixed with 3 L of Brand B fruit punch (32% fruit juice) to create a mixture containing 20% fruit juice?

18) Dan wants to make a 35% saline solution. He has already poured 4 qt. of a 80% saline solution into a beaker. How many qt. of a 5% saline solution must he add to this to create the desired mixture?

19) How much of Brand A fruit punch (38% fruit juice) must be mixed with 10 L of Brand B fruit punch (8% fruit juice) to create a mixture containing 13% fruit juice?

20) Micaela wants to make a 18% alcohol solution. She has already poured 9 L of a 16% alcohol solution into a beaker. How many L of a 20% alcohol solution must she add to this to create the desired mixture?

21) How much soil with 30% clay do you need to add to 3 ft³ of soil with 50% clay in order to make a soil with 36% clay?

22) How many L of a 90% acid solution must be mixed with 7 L of a 35% acid solution to make a 55% solution?

23) Kathryn wants to make a 31% saline solution. She has already poured 9 L of a 15% saline solution into a beaker. How many L of a 55% saline solution must she add to this to create the desired mixture?

24) 9 qt. of a sugar solution was mixed with 1 qt. of pure water to make a 81% sugar solution. Find the percent concentration of the first solution.

Answers to Assignment (ID: 4)

1) 28%
2) 7 qt.
3) 8 qt.
4) 6 kgs
5) 60%
6) $4/kg
7) 46%
8) $1/kg
9) 10 lb.
10) 50%
11) 2 kg
12) 4 yd³
13) 1 m³
14) 6 L
15) 37%
16) 25%
17) 6 L
18) 6 qt.
19) 2 L
20) 9 L
21) 7 ft³
22) 4 L
23) 6 L
24) 90%

Name_____

Assignment

Date_____ Period____

1) What is the price per kg of soybean oil if 6 kg were mixed with 3 kg of canola oil which costs $1/kg to make 9 kg of vegetable oil which costs $3/kg?

2) Sumalee made a nut mixture that contains 35% peanuts by mixing together 15 kg of mixed nuts that contain 45% peanuts and 10 kg of a different brand of mixed nuts. The second brand of mixed nuts contained what percent peanuts?

3) How much of Brand A fruit punch (10% fruit juice) must be mixed with 5 gal. of Brand B fruit punch (50% fruit juice) to create a mixture containing 30% fruit juice?

4) Totsakan and his brother mixed together two types of soil to make 12 yd³ of soil with a 45% silt content. They used 2 yd³ of a soil with 20% silt content and 10 yd³ of another type of soil. What was the silt content of the second type of soil?

5) Wilbur wants to make a 14% acid solution. He has already poured 4 ml of a 20% acid solution into a beaker. How many ml of a 10% acid solution must he add to this to create the desired mixture?

6) Lisa created a metal containing 11% silver by combining two other metals. One of these other metals weighed 1 lb. and contained 2% silver. If the other weighed 3 lb. then what percent of it was silver?

7) Paul and his brother mixed together two types of soil to make 10 yd³ of soil with a 23% clay content. They used 1 yd³ of a soil with 50% clay content and 9 yd³ of another type of soil. What was the clay content of the second type of soil?

8) How much of Brand A fruit punch (40% fruit juice) must be mixed with 4 gal. of grape juice to create a mixture containing 80% fruit juice?

9) How much of Brand A fruit punch (30% fruit juice) must be mixed with 10 gal. of grape juice to create a mixture containing 80% fruit juice?

10) Shawna mixed together 10 gal. of Brand A fruit drink and 2 gal. of Brand B fruit drink which contains 51% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 31% fruit juice.

11) Jill mixed together 10 gal. of Brand A fruit drink and 5 gal. of Brand B fruit drink which contains 26% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 30% fruit juice.

12) Mark created a metal containing 46% silver by combining two other metals. One of these other metals weighed 3 lb. and contained 10% silver. If the other weighed 6 lb. then what percent of it was silver?

13) Mei created a metal containing 48% copper by combining two other metals. One of these other metals weighed 8 oz. and contained 66% copper. If the other weighed 12 oz. then what percent of it was copper?

14) How many lb of arabica coffee beans which cost $4/lb must be added to 6 lb of robusta coffee beans which cost $11/lb to make Joe's Premium Coffee Blend which costs $10/lb?

15) How many kg of cane molasses which costs $1/kg must be added to 6 kg of beet molasses which costs $4/kg to make Jessica's Premium Molasses which costs $3/kg?

16) How many kg of a metal containing 4% iron must be combined with 11 kg of pure iron to form an alloy containing 92% iron?

17) How many lbs. of peanuts must Gabriella add to 8 lbs. of mixed nuts containing 20% peanuts to make a mixture with 68% peanuts?

18) How many gal. of a 60% alcohol solution must be mixed with 3 gal. of a 40% alcohol solution to make a 54% solution?

19) How many lb of Indonesian cinnamon which costs $12/lb must be added to 3 lb of Thai cinnamon which costs $20/lb to make Brand M Cinnamon which costs $15/lb?

20) 6 kg of cane molasses were mixed with 3 kg of beet molasses which costs $4/kg to make Scott's Premium Molasses which costs $2/kg. What is the price per kg of cane molasses?

21) Eduardo made a nut mixture that contains 30% peanuts by mixing together 10 oz. of mixed nuts that contain 16% peanuts and 20 oz. of a different brand of mixed nuts. The second brand of mixed nuts contained what percent peanuts?

22) What is the price per kg of copper if 8 kg were mixed with 4 kg of tin which costs $8/kg to make 12 kg of bronze which costs $4/kg?

23) Darryl created a metal containing 25% copper by combining two other metals. One of these other metals weighed 6 oz. and contained 20% copper. If the other weighed 2 oz. then what percent of it was copper?

24) 10 lb of Indonesian cinnamon were mixed with 4 lb of Thai cinnamon which costs $19/lb to make Brand M Cinnamon which costs $14/lb. What is the price per lb of Indonesian cinnamon?

Answers to Assignment (ID: 5)

1) $4/kg
2) 20%
3) 5 gal.
4) 50%
5) 6 ml
6) 14%
7) 20%
8) 2 gal.
9) 4 gal.
10) 27%
11) 32%
12) 64%
13) 36%
14) 1 lb
15) 3 kgs
16) 1 kg
17) 12 lbs.
18) 7 gal.
19) 5 lbs
20) $1/kg
21) 37%
22) $2/kg
23) 40%
24) $12/lb

Assignment

1) What is the price per kg of arugula if 5 kg were mixed with 10 kg of spinach which costs $2/kg to make 15 kg of premium salad mix which costs $3/kg?

2) Stefan mixed together 9 gal. of Brand A fruit drink and 3 gal. of Brand B fruit drink which contains 8% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 20% fruit juice.

3) How much of Brand A fruit punch (40% fruit juice) must be mixed with 4 gal. of Brand B fruit punch (55% fruit juice) to create a mixture containing 45% fruit juice?

4) What is the price per oz of copper if 12 oz were mixed with 6 oz of tin which costs $5/oz to make 18 oz of bronze which costs $3/oz?

5) How much of Brand A fruit punch (20% fruit juice) must be mixed with 9 L of Brand B fruit punch (35% fruit juice) to create a mixture containing 29% fruit juice?

6) Mike created a metal containing 70% iron by combining 6 lb. of pure iron with 3 lb. of another metal. What percent of the other metal was iron?

7) Jimmy created a metal containing 60% nickel by combining 4 oz. of pure nickel with 8 oz. of another metal. What percent of the other metal was nickel?

8) How many qt. of a 60% alcohol solution must be mixed with 4 qt. of pure water to make a 40% solution?

9) How much of Brand A fruit punch (40% fruit juice) must be mixed with 4 L of Brand B fruit punch (10% fruit juice) to create a mixture containing 20% fruit juice?

10) What is the price per kg of Indonesian cinnamon if 6 kg were mixed with 2 kg of Thai cinnamon which costs $18/kg to make 8 kg of Brand M Cinnamon which costs $15/kg?

11) How many kg of mixed nuts that contain 45% peanuts must Ndiba add to 18 kg of mixed nuts that contain 50% peanuts to make a mixture with 48% peanuts?

12) 10 gal. of an acid solution was mixed with 4 gal. of pure water to make a 25% acid solution. Find the percent concentration of the first solution.

13) How many lb of walnuts which cost $8/lb must be added to 4 lb of peanuts which cost $5/lb to make mixed nuts which cost $7/lb?

14) How many lb of arabica coffee beans which cost $6/lb must be added to 2 lb of robusta coffee beans which cost $12/lb to make James' Premium Coffee Blend which costs $7/lb?

15) How many kg of copper which costs $2/kg must be added to 4 kg of tin which costs $5/kg to make bronze which costs $3/kg?

16) 7 oz of brand X sugar were mixed with 14 oz of brand Y sugar which costs $1/oz to make generic sugar which costs $2/oz. What is the price per oz of brand X sugar?

17) Julia made a nut mixture that contains 32% peanuts by mixing together 16 oz. of mixed nuts that contain 20% peanuts and 8 oz. of a different brand of mixed nuts. The second brand of mixed nuts contained what percent peanuts?

18) How much soil with 35% silt do you need to add to 2 m³ of soil with 55% silt in order to make a soil with 39% silt?

19) Jasmine wants to make a 76% alcohol solution. She has already poured 1 fl. oz. of a 60% alcohol solution into a beaker. How many fl. oz. of a 80% alcohol solution must she add to this to create the desired mixture?

20) How much of Brand A fruit punch (30% fruit juice) must be mixed with 3 L of apple juice to create a mixture containing 51% fruit juice?

21) 4 L of a sugar solution was mixed with 1 L of pure water to make a 32% sugar solution. Find the percent concentration of the first solution.

22) Danielle and her brother mixed together two types of soil to make 5 m³ of soil with a 24% silt content. They used 1 m³ of a soil with 40% silt content and 4 m³ of another type of soil. What was the silt content of the second type of soil?

23) How much of Brand A fruit punch (56% fruit juice) must be mixed with 8 gal. of grape juice to create a mixture containing 88% fruit juice?

24) How many oz. of a metal containing 54% silver must be combined with 3 oz. of pure silver to form an alloy containing 77% silver?

Answers to Assignment (ID: 6)

1) $5/kg
2) 24%
3) 8 gal.
4) $2/oz
5) 6 L
6) 10%
7) 40%
8) 8 qt.
9) 2 L
10) $14/kg
11) 12 kg
12) 35%
13) 8 lbs
14) 10 lbs
15) 8 kgs
16) $4/oz
17) 56%
18) 8 m³
19) 4 fl. oz.
20) 7 L
21) 40%
22) 20%
23) 3 gal.
24) 3 oz.

Assignment

1) How many lb. of a metal containing 14% iron must be combined with 12 lb. of a metal containing 80% iron to form an alloy containing 58% iron?

2) 7 fl. oz. of a saline solution was mixed with 3 fl. oz. of a 80% saline solution to make a 52% saline solution. Find the percent concentration of the first solution.

3) How many oz of sliced peaches which cost $10/oz must be added to 3 oz of sliced bananas which cost $4/oz to make fruit salad which costs $8/oz?

4) Aliyah created a metal containing 74% iron by combining two other metals. One of these other metals weighed 1 lb. and contained 20% iron. If the other weighed 9 lb. then what percent of it was iron?

5) 9 qt. of an acid solution was mixed with 1 qt. of a 70% acid solution to make a 43% acid solution. Find the percent concentration of the first solution.

6) Pranav mixed together 4 gal. of Brand A fruit drink and 5 gal. of apple juice. Find the percent of fruit juice in Brand A if the mixture contained 60% fruit juice.

7) How many kg of arabica coffee beans which cost $6/kg must be added to 3 kg of robusta coffee beans which cost $9/kg to make Norachai's Premium Coffee Blend which costs $7/kg?

8) Huong and her brother mixed together two types of soil to make 15 m³ of soil with a 36% silt content. They used 9 m³ of a soil with 40% silt content and 6 m³ of another type of soil. What was the silt content of the second type of soil?

9) How many ml of a 70% saline solution must be mixed with 9 ml of pure water to make a 25% solution?

10) How many oz of arugula which costs $5/oz must be added to 6 oz of spinach which costs $2/oz to make premium salad mix which costs $3/oz?

11) How many lbs. of mixed nuts that contain 25% peanuts must Jennifer add to 4 lbs. of mixed nuts that contain 75% peanuts to make a mixture with 35% peanuts?

12) Krystal made a nut mixture that contains 86% peanuts by mixing 4 oz. of mixed nuts with 8 oz. of peanuts. The mixed nuts contained what percent peanuts?

13) Beth and her brother mixed together some soil and some silt to make 8 ft³ of soil with a 83% silt content. They used 6 ft³ of silt and 2 ft³ of a soil they purchased. What was the silt content of the soil they purchased?

14) 6 ml of an alcohol solution was mixed with 12 ml of pure water to make a 20% alcohol solution. Find the percent concentration of the first solution.

15) Perry wants to make a 60% saline solution. He has already poured 1 qt. of a 25% saline solution into a beaker. How many qt. of a 65% saline solution must he add to this to create the desired mixture?

16) How many lb of brand X coffee which costs $8/lb must be added to 8 lb of brand Y coffee which costs $17/lb to make Jack's special coffee blend which costs $14/lb?

17) How many mg of a metal containing 52% platinum must be combined with 3 mg of pure platinum to form an alloy containing 70% platinum?

18) How many kg of mixed nuts that contain 30% peanuts must Julio add to 18 kg of mixed nuts that contain 70% peanuts to make a mixture with 54% peanuts?

19) How many lb. of a metal containing 70% iron must be combined with 4 lb. of a metal containing 60% iron to form an alloy containing 66% iron?

20) How many lb. of a metal containing 20% copper must be combined with 4 lb. of pure copper to form an alloy containing 40% copper?

21) Emily created a metal containing 58% nickel by combining 8 kg of pure nickel with 12 kg of another metal. What percent of the other metal was nickel?

22) 6 L of a sugar solution was mixed with 5 L of a 22% sugar solution to make a 16% sugar solution. Find the percent concentration of the first solution.

23) 8 fl. oz. of a saline solution was mixed with 12 fl. oz. of a 20% saline solution to make a 28% saline solution. Find the percent concentration of the first solution.

24) What is the price per kg of brand X coffee if 4 kg were mixed with 12 kg of brand Y coffee which costs $4/kg to make 16 kg of Daniel's special coffee blend which costs $9/kg?

Answers to Assignment (ID: 7)

1) 6 lb.
2) 40%
3) 6 ozs
4) 80%
5) 40%
6) 10%
7) 6 kgs
8) 30%
9) 5 ml
10) 3 ozs
11) 16 lbs.
12) 58%
13) 32%
14) 60%
15) 7 qt.
16) 4 lbs
17) 5 mg
18) 12 kg
19) 6 lb.
20) 12 lb.
21) 30%
22) 11%
23) 40%
24) $24/kg

Name_____

Assignment

Date_____ Period____

1) Dan mixed together 3 gal. of Brand A fruit drink and 4 gal. of grape juice. Find the percent of fruit juice in Brand A if the mixture contained 70% fruit juice.

2) How much soil with 35% sand do you need to add to 8 yd³ of soil with 55% sand in order to make a soil with 51% sand?

3) How much sand do you need to add to 3 ft³ of soil with 30% sand in order to make a soil with 79% sand?

4) Trevon mixed together 3 gal. of Brand A fruit drink and 2 gal. of Brand B fruit drink which contains 50% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 32% fruit juice.

5) How many oz of sliced peaches which cost $4/oz must be added to 3 oz of sliced bananas which cost $7/oz to make fruit salad which costs $5/oz?

6) How many kg of peanuts must Kathryn add to 16 kg of mixed nuts containing 65% peanuts to make a mixture with 72% peanuts?

7) Arjun made a nut mixture that contains 20% peanuts by mixing together 12 kg of mixed nuts that contain 15% peanuts and 4 kg of a different brand of mixed nuts. The second brand of mixed nuts contained what percent peanuts?

8) Anjali made a nut mixture that contains 24% peanuts by mixing together 4 oz. of mixed nuts that contain 30% peanuts and 6 oz. of a different brand of mixed nuts. The second brand of mixed nuts contained what percent peanuts?

9) Sumalee and her brother mixed together two types of soil to make 15 m³ of soil with a 21% sand content. They used 9 m³ of a soil with 15% sand content and 6 m³ of another type of soil. What was the sand content of the second type of soil?

10) Totsakan mixed together 9 gal. of Brand A fruit drink and 7 gal. of Brand B fruit drink which contains 5% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 23% fruit juice.

11) What is the price per kg of walnuts if 5 kg were mixed with 4 kg of peanuts which cost $11/kg to make 9 kg of mixed nuts which cost $6/kg?

12) How much of Brand A fruit punch (60% fruit juice) must be mixed with 9 gal. of grape juice to create a mixture containing 90% fruit juice?

13) 12 fl. oz. of a sugar solution was mixed with 9 fl. oz. of pure water to make a 40% sugar solution. Find the percent concentration of the first solution.

14) Paul wants to make a 55% saline solution. He has already poured 12 fl. oz. of a 40% saline solution into a beaker. How many fl. oz. of a 85% saline solution must he add to this to create the desired mixture?

15) How many lb. of a metal containing 55% copper must be combined with 9 lb. of a metal containing 85% copper to form an alloy containing 73% copper?

16) How many mg of a metal containing 50% gold must be combined with 6 mg of a metal containing 45% gold to form an alloy containing 47% gold?

17) 7 gal. of an alcohol solution was mixed with 1 gal. of pure water to make a 56% alcohol solution. Find the percent concentration of the first solution.

18) 2 qt. of an acid solution was mixed with 3 qt. of pure water to make a 18% acid solution. Find the percent concentration of the first solution.

19) 6 qt. of a sugar solution was mixed with 2 qt. of a 90% sugar solution to make a 24% sugar solution. Find the percent concentration of the first solution.

20) 7 L of a saline solution was mixed with 3 L of a 60% saline solution to make a 53% saline solution. Find the percent concentration of the first solution.

21) Joe and his brother mixed together some soil and some sand to make 7 ft³ of soil with a 70% sand content. They used 2 ft³ of sand and 5 ft³ of a soil they purchased. What was the sand content of the soil they purchased?

22) 9 qt. of a saline solution was mixed with 1 qt. of pure water to make a 63% saline solution. Find the percent concentration of the first solution.

23) Jacob and his brother mixed together two types of soil to make 9 ft³ of soil with a 48% sand content. They used 3 ft³ of a soil with 40% sand content and 6 ft³ of another type of soil. What was the sand content of the second type of soil?

24) How many oz. of mixed nuts that contain 26% peanuts must Gabriella add to 12 oz. of mixed nuts that contain 38% peanuts to make a mixture with 35% peanuts?

Answers to Assignment (ID: 8)

1) 30%

2) 2 yd³

3) 7 ft³

4) 20%

5) 6 ozs

6) 4 kg

7) 35%

8) 20%

9) 30%

10) 37%

11) $2/kg

12) 3 gal.

13) 70%

14) 6 fl. oz.

15) 6 lb.

16) 4 mg

17) 64%

18) 45%

19) 2%

20) 50%

21) 58%

22) 70%

23) 52%

24) 4 oz.

Name_____

Assignment

Date_____ Period____

1) How many kg of peanuts must Stephanie add to 5 kg of mixed nuts containing 40% peanuts to make a mixture with 85% peanuts?

2) How many lbs. of mixed nuts that contain 26% peanuts must Kayla add to 20 lbs. of mixed nuts that contain 74% peanuts to make a mixture with 58% peanuts?

3) Scott made a nut mixture that contains 37% peanuts by mixing 18 lbs. of mixed nuts with 4 lbs. of peanuts. The mixed nuts contained what percent peanuts?

4) Eduardo and his brother mixed together some soil and some clay to make 5 m³ of soil with a 70% clay content. They used 2 m³ of clay and 3 m³ of a soil they purchased. What was the clay content of the soil they purchased?

5) How many lb. of a metal containing 10% silver must be combined with 10 lb. of pure silver to form an alloy containing 70% silver?

6) How many oz. of mixed nuts that contain 60% peanuts must DeShawn add to 9 oz. of mixed nuts that contain 30% peanuts to make a mixture with 50% peanuts?

7) How much of Brand A fruit punch (36% fruit juice) must be mixed with 2 gal. of Brand B fruit punch (12% fruit juice) to create a mixture containing 24% fruit juice?

8) 2 lb of walnuts were mixed with 3 lb of peanuts which cost $7/lb to make mixed nuts which cost $5/lb. What is the price per lb of walnuts?

9) How many oz. of mixed nuts that contain 64% peanuts must Stefan add to 10 oz. of mixed nuts that contain 71% peanuts to make a mixture with 69% peanuts?

10) How many mg of a metal containing 80% iron must be combined with 9 mg of pure iron to form an alloy containing 92% iron?

11) Abhasra wants to make a 71% acid solution. She has already poured 2 gal. of a 80% acid solution into a beaker. How many gal. of a 65% acid solution must she add to this to create the desired mixture?

12) Sarawong wants to make a 44% sugar solution. He has already poured 8 ml of a 40% sugar solution into a beaker. How many ml of a 60% sugar solution must he add to this to create the desired mixture?

13) 12 L of a saline solution was mixed with 8 L of a 75% saline solution to make a 60% saline solution. Find the percent concentration of the first solution.

14) 8 L of an acid solution was mixed with 9 L of pure water to make a 16% acid solution. Find the percent concentration of the first solution.

15) How many oz of cane molasses which costs $4/oz must be added to 6 oz of beet molasses which costs $1/oz to make John's Premium Molasses which costs $3/oz?

16) How many oz. of a metal containing 30% copper must be combined with 3 oz. of a metal containing 70% copper to form an alloy containing 54% copper?

17) How many kg of soybean oil which costs $4/kg must be added to 2 kg of canola oil which costs $1/kg to make vegetable oil which costs $2/kg?

18) How many mg of a metal containing 20% iron must be combined with 3 mg of a metal containing 70% iron to form an alloy containing 35% iron?

19) What is the price per lb of brand X sugar if 1 lb were mixed with 2 lb of brand Y sugar which costs $4/lb to make 3 lb of generic sugar which costs $3/lb?

20) How many lbs. of mixed nuts that contain 70% peanuts must Adam add to 8 lbs. of peanuts to make a mixture with 82% peanuts?

21) How many oz. of mixed nuts that contain 30% peanuts must James add to 6 oz. of mixed nuts that contain 40% peanuts to make a mixture with 33% peanuts?

22) How much soil with 15% clay do you need to add to 1 ft³ of soil with 30% clay in order to make a soil with 20% clay?

23) Jose and his brother mixed together two types of soil to make 5 yd³ of soil with a 52% clay content. They used 3 yd³ of a soil with 50% clay content and 2 yd³ of another type of soil. What was the clay content of the second type of soil?

24) Julia mixed together 6 gal. of Brand A fruit drink and 2 gal. of apple juice. Find the percent of fruit juice in Brand A if the mixture contained 55% fruit juice.

Answers to Assignment (ID: 9)

1) 15 kg

2) 10 lbs.

3) 23%

4) 50%

5) 5 lb.

6) 18 oz.

7) 2 gal.

8) $2/lb

9) 4 oz.

10) 6 mg

11) 3 gal.

12) 2 ml

13) 50%

14) 34%

15) 12 ozs

16) 2 oz.

17) 1 kg

18) 7 mg

19) $1/lb

20) 12 lbs.

21) 14 oz.

22) 2 ft³

23) 55%

24) 40%

Assignment

1) What is the price per oz of walnuts if 3 oz were mixed with 6 oz of peanuts which cost $7/oz to make 9 oz of mixed nuts which cost $6/oz?

2) How many oz of cane molasses which costs $1/oz must be added to 3 oz of beet molasses which costs $4/oz to make Jasmine's Premium Molasses which costs $2/oz?

3) 12 L of a sugar solution was mixed with 3 L of a 54% sugar solution to make a 46% sugar solution. Find the percent concentration of the first solution.

4) Amanda mixed together 7 L of Brand A fruit drink and 3 L of apple juice. Find the percent of fruit juice in Brand A if the mixture contained 44% fruit juice.

5) How much soil with 31% clay do you need to add to 10 yd³ of soil with 52% clay in order to make a soil with 45% clay?

6) Alberto wants to make a 45% saline solution. He has already poured 5 ml of pure water into a beaker. How many ml of a 70% saline solution must he add to this to create the desired mixture?

7) Castel wants to make a 26% saline solution. He has already poured 5 fl. oz. of a 46% saline solution into a beaker. How many fl. oz. of a 16% saline solution must he add to this to create the desired mixture?

8) 4 gal. of a saline solution was mixed with 2 gal. of a 68% saline solution to make a 40% saline solution. Find the percent concentration of the first solution.

9) 4 gal. of a saline solution was mixed with 1 gal. of a 90% saline solution to make a 82% saline solution. Find the percent concentration of the first solution.

10) 11 gal. of a saline solution was mixed with 3 gal. of pure water to make a 33% saline solution. Find the percent concentration of the first solution.

11) How many lb. of a metal containing 61% platinum must be combined with 7 lb. of a metal containing 11% platinum to form an alloy containing 26% platinum?

12) Kali and her brother mixed together two types of soil to make 15 ft³ of soil with a 23% sand content. They used 10 ft³ of a soil with 20% sand content and 5 ft³ of another type of soil. What was the sand content of the second type of soil?

13) How many fl. oz. of a 80% alcohol solution must be mixed with 11 fl. oz. of pure water to make a 36% solution?

14) How much sand do you need to add to 5 yd³ of soil with 12% sand in order to make a soil with 45% sand?

15) Huong wants to make a 40% acid solution. She has already poured 6 ml of a 25% acid solution into a beaker. How many ml of a 50% acid solution must she add to this to create the desired mixture?

16) How much sand do you need to add to 2 m³ of soil with 28% sand in order to make a soil with 84% sand?

17) How much silt do you need to add to 4 ft³ of soil with 55% silt in order to make a soil with 70% silt?

18) Jennifer mixed together 5 L of Brand A fruit drink and 10 L of apple juice. Find the percent of fruit juice in Brand A if the mixture contained 80% fruit juice.

19) Krystal and her brother mixed together two types of soil to make 8 m³ of soil with a 39% sand content. They used 6 m³ of a soil with 40% sand content and 2 m³ of another type of soil. What was the sand content of the second type of soil?

20) Beth mixed together 3 L of Brand A fruit drink and 2 L of Brand B fruit drink which contains 56% fruit juice. Find the percent of fruit juice in Brand A if the mixture contained 38% fruit juice.

21) 3 qt. of an alcohol solution was mixed with 7 qt. of a 80% alcohol solution to make a 71% alcohol solution. Find the percent concentration of the first solution.

22) Perry and his brother mixed together two types of soil to make 8 m³ of soil with a 25% sand content. They used 2 m³ of a soil with 40% sand content and 6 m³ of another type of soil. What was the sand content of the second type of soil?

23) Jack created a metal containing 24% copper by combining two other metals. One of these other metals weighed 12 lb. and contained 20% copper. If the other weighed 3 lb. then what percent of it was copper?

24) How many oz. of mixed nuts that contain 25% peanuts must Ted add to 9 oz. of mixed nuts that contain 55% peanuts to make a mixture with 35% peanuts?

Answers to Assignment (ID: 10)

1) $4/oz
2) 6 ozs
3) 44%
4) 20%
5) 5 yd³
6) 9 ml
7) 10 fl. oz.
8) 26%
9) 80%
10) 42%
11) 3 lb.
12) 29%
13) 9 fl. oz.
14) 3 yd³
15) 9 ml
16) 7 m³
17) 2 ft³
18) 40%
19) 36%
20) 26%
21) 50%
22) 20%
23) 40%
24) 18 oz.