6th odd work can #

5.1 Application Problems

questions

Solve.

1. A butcher combined hamburger which cost $2.50 per pound with hamburger which cost $3.10 per pound. How many pounds of each were used to make an 80-pound mixture to sell for $2.65 per pound?

60 lb ($2.50)

20 lb ($3.10)

2. A butcher combined hamburger which cost $4.40 per kilogram with hamburger which cost $8.40 per kilogram. How many kilograms of each were used to make a mixture of 50 kg to sell for $6.00 per kilogram?

3. How many ounces of pure gold which cost $400 an ounce must be mixed with 20 oz of an alloy which cost $220 an ounce to make an alloy which would cost $300 an ounce?

160z

4. A goldsmith combined pure gold which cost $675 per ounce with an alloy costing $325 per ounce. How many ounces of each should be used to make 5 oz of a gold alloy which sells for $465 per ounce?

5. Find the selling price per pound of a mixture made from 12 lb of chocolate which cost $4.00 per pound and 30 lb of chocolate which cost $2.25 per pound.

$2.75/lb

6. How many kilograms of chocolates which cost $7.00 per kilogram must be mixed with 20 kg of chocolates which cost $3.50 per kilogram to make a box of mixed chocolates to sell for $4.50 per kilogram?

7. A grocer combined cranberry juice which cost $3.25 per gallon with apple juice which cost $2.25 per gallon. How many gallons of each should be used to make 100 gal of cranapple juice to sell for $2.50 per gallon?

25 gallons (cranberry)

75 gallons (apple juice)

8. Find the selling price per liter of a mixture made from 40 L of cranberry juice which cost $1.00 per liter and 120 L of apple juice which cost $.60 per liter.

9. How many pounds of walnuts which cost $1.60 per pound must be mixed with 18 lb of cashews which cost $2.50 per pound to make a mixture which costs $1.90 per pound?

36.1b

10. A grocer combined peanuts which cost $2.50 per kilogram with walnuts which cost $4.50 per kilogram. How many kilograms of each were used to make a 100-kilogram mixture to sell for $3.24 per kilogram?

Solution on p. A21

work an odd # questions

Solve.

11. Find the selling price per pound of a mixture of coffee made from 25 lb of coffee which cost $4.82 per pound and 40 lb of coffee which cost $3.00 per pound.

$3.70

12. How many kilograms of coffee which cost $9 per kilogram must be mixed with 16 kg of coffee which cost $5 per kilogram to make a mixture which costs $6.50 per kilogram?

13. How many pounds of cheese which cost $4.20 per pound must be mixed with 12 lb of cheese which cost $2.25 per pound to make a grated cheese topping which costs $3.40 per pound?

17.25 16

14. Find the selling price per kilogram of a grated cheese mixture made from 8 kg of cheese which cost $9.20 per kilogram and 12 kg of cheese which cost $5.50 per kilogram.

15. To make a feed for cattle, a feed store operation combined soybeans which cost $8 per bushel with corn which cost $3 per bushel. How many bushels of each were used to make a mixture of 5000 bushels to sell for $4.50 per bushel?

1500

16. How many bushels of soybeans which cost $7.50 per bushel must be mixed with 2400 bushels of corn which cost $3.25 per bushel to make a mixture which costs $4.50 per bushel?

17. Find the selling price per ounce of a mixture of 200 c_ of silver which cost $5.50 per ounce and 500 oz of an alloy which cost $2.00 per ounce.

$3

18. A silversmith combined a silver alloy which cost $4.30 per ounce with an alloy which cost $1.80 per ounce. How many ounces of each were used to make a mixture of 200 oz to sell for $2.50 per ounce?

19. How many liters of face cream which cost $80 per liter must be mixed with 6 L of face cream which cost $25 per liter to make a face cream which sells for $36 per liter?

1.5 L

20. Find the selling price per ounce of a face cream mixture made from 40 oz of face cream which cost $4.40 per ounce and 100 oz of face cream which cost $2.30 per ounce.