Mixture & Work Word Problems · 1

A chemist needs 15 liters of a 40% acid solution and has a 35% solution and a 60% solution to mix. How many liters of the 60% solution should the chemist use?

Mixture & Work Word Problems · 2

Nora can sort a crate of mail in 30 minutes and Jack can do it in 20 minutes. Nora works alone for 5 minutes, and then Jack joins in. How many more minutes does it take them to finish the job together?

Mixture & Work Word Problems · 3

A store wants 32 pounds of a mixture worth $11 per pound, made from black tea costing $8 per pound and jasmine tea costing $16 per pound. How many pounds of black tea are needed?

Mixture & Work Word Problems · 4

A pipe can fill an empty tank in 17 hours. A drain can empty the full tank in 34 hours. If the pipe is turned on while the drain is open, how many hours does it take to fill the empty tank?

Mixture & Work Word Problems · 5

How many liters of pure acid must be added to 22 liters of a 30% acid solution to make a 45% acid solution?

Mixture & Work Word Problems · 6

Omar can mow a large field in 2 hours. Lily can do the same job in 8 hours. How many hours does the job take if they work together? Write a mixed number.

Mixture & Work Word Problems · 7

How many liters of water must be added to 18 liters of a 35% sugar solution to make a 15% sugar solution?

Mixture & Work Word Problems · 8

Working together, Priya and Sam can tile a floor in 6 hours. Working alone, Priya needs 15 hours. How many hours would Sam need working alone?

Mixture & Work Word Problems · 2

ANSWER

10

Mixture & Work Word Problems · 1

ANSWER

3

Mixture & Work Word Problems · 4

ANSWER

34

Mixture & Work Word Problems · 3

ANSWER

20

Mixture & Work Word Problems · 6

ANSWER

$$1\frac{3}{5}$$

Mixture & Work Word Problems · 5

ANSWER

6

Mixture & Work Word Problems · 8

ANSWER

10

Mixture & Work Word Problems · 7

ANSWER

24

Mixture & Work Word Problems · 9

A chemist needs 24 liters of a 75% salt solution and has a 40% solution and an 80% solution to mix. How many liters of the 40% solution should the chemist use?

Mixture & Work Word Problems · 10

Priya can weed a garden in 15 hours and Sam can do it in 10 hours. Priya works alone for 5 hours, and then Sam joins in. How many more hours does it take them to finish the job together?

Mixture & Work Word Problems · 11

A store wants 21 pounds of a mixture worth $17 per pound, made from peanuts costing $14 per pound and cashews costing $21 per pound. How many pounds of peanuts are needed?

Mixture & Work Word Problems · 12

A pipe can fill an empty tank in 20 hours. A drain can empty the full tank in 36 hours. If the pipe is turned on while the drain is open, how many hours does it take to fill the empty tank?

Mixture & Work Word Problems · 13

How many liters of pure alcohol must be added to 45 liters of a 5% alcohol solution to make a 25% alcohol solution?

Mixture & Work Word Problems · 14

Nora can tile a floor in 3 hours. Jack can do the same job in 11 hours. How many hours does the job take if they work together? Write a mixed number.

Mixture & Work Word Problems · 15

How many liters of water must be added to 14 liters of a 35% salt solution to make a 10% salt solution?

Mixture & Work Word Problems · 16

Working together, Ivan and Zoe can wipe down the lab tables in 18 minutes. Working alone, Ivan needs 27 minutes. How many minutes would Zoe need working alone?

Mixture & Work Word Problems · 10

ANSWER

4

Mixture & Work Word Problems · 9

ANSWER

3

Mixture & Work Word Problems · 12

ANSWER

45

Mixture & Work Word Problems · 11

ANSWER

12

Mixture & Work Word Problems · 14

ANSWER

$$2\frac{5}{14}$$

Mixture & Work Word Problems · 13

ANSWER

12

Mixture & Work Word Problems · 16

ANSWER

54

Mixture & Work Word Problems · 15

ANSWER

35

Mixture & Work Word Problems · 17

A chemist needs 33 liters of a 55% salt solution and has a 30% solution and an 85% solution to mix. How many liters of the 85% solution should the chemist use?

Mixture & Work Word Problems · 18

Ana can wash a sink full of dishes in 10 minutes and Ben can do it in 40 minutes. Ana works alone for 5 minutes, and then Ben joins in. How many more minutes does it take them to finish the job together?

Mixture & Work Word Problems · 19

A store wants 6 pounds of a mixture worth $13 per pound, made from raisins costing $5 per pound and almonds costing $17 per pound. How many pounds of almonds are needed?

Mixture & Work Word Problems · 20

A pipe can fill an empty tank in 16 hours. A drain can empty the full tank in 24 hours. If the pipe is turned on while the drain is open, how many hours does it take to fill the empty tank?

Mixture & Work Word Problems · 21

How many liters of pure acid must be added to 17 liters of a 10% acid solution to make a 15% acid solution?

Mixture & Work Word Problems · 22

Nora can paint a fence in 2 hours. Jack can do the same job in 11 hours. How many hours does the job take if they work together? Write a mixed number.

Mixture & Work Word Problems · 23

How many liters of water must be added to 10 liters of a 30% acid solution to make a 25% acid solution?

Mixture & Work Word Problems · 24

Working together, Ivan and Zoe can sort a crate of mail in 24 minutes. Working alone, Ivan needs 56 minutes. How many minutes would Zoe need working alone?

Mixture & Work Word Problems · 18

ANSWER

4

Mixture & Work Word Problems · 17

ANSWER

15

Mixture & Work Word Problems · 20

ANSWER

48

Mixture & Work Word Problems · 19

ANSWER

4

Mixture & Work Word Problems · 22

ANSWER

$$1\frac{9}{13}$$

Mixture & Work Word Problems · 21

ANSWER

1

Mixture & Work Word Problems · 24

ANSWER

42

Mixture & Work Word Problems · 23

ANSWER

2