



**THIRD SPACE
LEARNING**

Solve Equations with Fractions Worksheet

Algebra

Grades 6 to 8

Skill Questions

Name:

Date:

- 1 Solve for x in the equation

$$\frac{2}{3}x + 4 = 8$$

Answer

- 2 Solve for x in the equation

$$\frac{1}{2}x - 3 = 1$$

Answer

- 3 Solve for x in the equation

$$\frac{3}{4}(x - 2) = 5$$

Answer

- 4 Solve for x in the equation

$$\frac{1}{5} + \frac{2}{3}y = 3$$

Answer

- 5 Solve for x in the equation

$$\frac{1}{7}x - \frac{2}{5} = 3$$

Answer

Solve Equations with Fractions Worksheet | Grades 6 to 8

6 Solve for x in the equation

$$\frac{2}{3}x - 5 = 7$$

Answer

7 Solve for x in the equation

$$\frac{1}{4}x + 3 = 2$$

Answer

8 Solve for x in the equation

$$\frac{3}{5}(x - 2) = 4$$

Answer

9 Solve for x in the equation

$$\frac{1}{2} + \frac{3}{4}x = 5$$

Answer

10 Solve for x in the equation

$$\frac{2}{3} + \frac{4}{5}x = 7$$

Answer

Applied Questions

- 11 Mary spent $\frac{2}{5}$ of her monthly salary on rent and $\frac{1}{4}$ on groceries. If her remaining salary is \$700, what is her total monthly salary?

Answer

- 12 A rectangular garden is $\frac{3}{8}$ covered with flowers, and $\frac{1}{6}$ is covered with vegetables. If the uncovered area is 55 square meters, what is the total area of the garden?

Answer

- 13 A water tank is being filled at a rate of $\frac{1}{4}$ gallon per minute. If the tank is initially empty, how many minutes will it take to fill the tank, which has a capacity of 12 gallons?

Answer

Solve Equations with Fractions Worksheet | Grades 6 to 8

- 14 A recipe for a smoothie calls for $\frac{3}{4}$ cup of yogurt. If you want to make 5 smoothies, and each smoothie requires the same amount of yogurt, how much yogurt (Y) do you need in total?

Answer

- 15 A water tank is being filled at a rate of $\frac{1}{5}$ gallon per minute. If the tank is initially empty, how many minutes (M) will it take to fill the tank, which has a capacity of 10 gallons?

Answer

Answers

Question number	Question	Answers	Standard
1	Solve for x in the equation $\frac{2}{3}x + 4 = 8$	$x = 6$	7.EE.A.1
2	Solve for x in the equation $\frac{1}{2}x - 3 = 1$	$x = 8$	7.EE.A.1
3	Solve for x in the equation $\frac{3}{4}(x - 2) = 5$	$x = 8\frac{2}{3}$	7.EE.A.1
4	Solve for x in the equation $\frac{1}{5} + \frac{2}{3}y = 3$	$x = 4\frac{1}{5}$	7.EE.A.1
5	Solve for x in the equation $\frac{1}{7}x - \frac{2}{5} = 3$	$x = 23\frac{4}{5}$	7.EE.A.1
6	Solve for x in the equation $\frac{2}{3}x - 5 = 7$	$x = 18$	8.EE.C.7
7	Solve for x in the equation $\frac{1}{4}x + 3 = 2$	$x = -4$	8.EE.C.7
8	Solve for x in the equation $\frac{3}{5}(x - 2) = 4$	$x = 8\frac{2}{3}$	8.EE.C.7
9	Solve for x in the equation $\frac{1}{2} + \frac{3}{4}x = 5$	$x = 6$	8.EE.C.7
10	Solve for x in the equation $\frac{2}{3} + \frac{4}{5}x = 7$	$x = 7\frac{11}{12}$	8.EE.C.7
11	Mary spent $\frac{2}{5}$ of her monthly salary on rent and $\frac{1}{4}$ on groceries. If her remaining salary is \$700, what is her total monthly salary?	$s = \$2000$	7.EE.A.1

Solve Equations with Fractions Worksheet | Grades 6 to 8 | Answers

Question number	Question	Answers	Standard
12	A rectangular garden is $\frac{3}{8}$ covered with flowers, and $\frac{1}{6}$ is covered with vegetables. If the uncovered area is 55 square meters, what is the total area of the garden?	$a = 120$ square meters	7.EE.A.1
13	A water tank is being filled at a rate of $\frac{1}{4}$ gallon per minute. If the tank is initially empty, how many minutes will it take to fill the tank, which has a capacity of 12 gallons?	$m = 48$ minutes	7.EE.A.1
14	A recipe for a smoothie calls for $\frac{3}{4}$ cup of yogurt. If you want to make 5 smoothies, and each smoothie requires the same amount of yogurt, how much yogurt (Y) do you need in total?	$y = 3\frac{3}{4}$ cups	8.EE.C.7
15	A water tank is being filled at a rate of $\frac{1}{5}$ gallon per minute. If the tank is initially empty, how many minutes (M) will it take to fill the tank, which has a capacity of 10 gallons?	$m = 50$ minutes	8.EE.C.7

Do you have a group of students who need a boost in math?

Each student could receive a personalized lesson every week from our specialist one-on-one math tutors.

- ✓ Differentiated instruction for each student
- ✓ Aligned to your state's standard
- ✓ Scaffolded learning to close gaps

Speak to us

-  thirdspacelearning.com/us/
-  +1 929-298-4593
-  hello@thirdspacelearning.com



THIRD SPACE
LEARNING