

### ANSWER KEY

Complete each word problem. Simplify and express your answer as a mixed number if necessary. Show your work.

- Brady purchases 8 cases of water. He gives 2 cases to a friend and gives 4 more cases to the basketball team. What fraction of the water has he given away?

*Brady has given away  $\frac{3}{4}$  of the water.*

- Dr. Forest owns a large property on a remote island. He has decided to give  $\frac{3}{8}$  of his property to his son to build a home. What fraction of his property will Dr. Forest have left for himself?

*Dr. Forest will have  $\frac{5}{8}$  of his property left.*

- Migdalia has 10 identical pieces of poster board. She will need to cut them each into fifths to make strips for a craft project. After cutting, how many pieces will she have?

*Migdalia will have 50 pieces after cutting.*

- Georgiana is preparing to bake muffins. She places  $1\frac{1}{2}$  cups of brown sugar and  $2\frac{1}{4}$  cups of white sugar in a bowl. How much sugar is now in the bowl?

*There are  $3\frac{3}{4}$  cups of sugar in the bowl.*

- The Connelly family is serving pizza for a birthday party. They purchase 7 pizzas that are each cut into 8 slices. At the end of the party, there is 1 whole pizza and 3 slices of another left over. How many pizzas were eaten during the party? (Write your answer as a mixed number.)

*$5\frac{5}{8}$  pizzas were eaten at the party.*

- The Environmental Club chooses to donate half of their yearly income to an organization that saves the lives of injured penguins. The club's donation saves 8 penguins this year. What fraction of the club's yearly income has been spent on each of these penguins?

*$\frac{1}{16}$  of the club's yearly income was spent on each penguin.*

- Linette received a box of truffles as a gift. The box contains 4 white chocolate, 8 dark chocolate, 8 milk chocolate, and 4 chocolate raspberry truffles. What fraction of the truffles are not white chocolate?

*$\frac{5}{6}$  of the truffles are not white chocolate.*

- Dominic rides his bike  $\frac{9}{10}$  of a mile to his friend's house. He and his friend then ride their bikes an additional one-third of this distance to go to the park. What is the total distance Dominic travels to get to the park?

*Dominic travels  $1\frac{1}{5}$  miles to get to the park.*

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9. Raphael is working a summer job. He intends to save  $\frac{4}{10}$  of his earnings for a new computer and one-third of his earnings for college. He expects to spend the rest. What fraction of his earnings does Raphael intend to spend?

*Raphael intends to spend  $\frac{4}{15}$  of his summer earnings.*

10. Allen has  $10\frac{1}{2}$  pieces of sheet metal to be used on several projects. He needs 4 whole pieces for the first project,  $2\frac{2}{3}$  pieces for the second project, and  $3\frac{1}{4}$  pieces for the last project. Does he have enough sheet metal to complete all three projects? Justify your answer by showing how much more he would need or how much he would have left over.

*Yes, Allen has enough sheet metal. He will have  $\frac{7}{12}$  of a sheet left over.*

11. A baker pours  $\frac{3}{4}$  of a cup of oil. She will use half of the oil to bake a loaf of banana bread. How much oil will be used for the banana bread?

*$\frac{3}{8}$  cup of oil will be used for the banana bread.*

12. Max has 6 squash plants that each require  $1\frac{1}{4}$  quarts of water daily and 4 tomato plants that each require  $1\frac{1}{2}$  quarts daily. How much water will he use to care for his plants over the course of a week?

*Max will use  $94\frac{1}{2}$  quarts of water in a week.*

13. Before she started out, the indicator on the fuel gauge of Melinda's car displayed  $\frac{5}{8}$  of a tank of gas. After visiting a friend for the weekend, the indicator is now down to the quarter tank mark. If her car's tank holds 16 gallons of fuel, how many gallons were used on this trip?

*Melinda used 6 gallons of gas on the trip.*

14. A contractor measures the dimensions of a window so that weather stripping can be placed all the way around the window. The window measures 18 inches by 28 inches, and the contractor has  $7\frac{1}{3}$  feet of weather stripping on hand. Will this be enough to cover all the edges of the window? Justify your answer by showing how much more would be needed or how much would be left over.

*No, there is not enough weatherstripping.  $\frac{1}{3}$  of a foot (or 4 inches) will still be needed.*

15. Laurel has a half yard of cloth. She uses one-third of this cloth for crafts on Monday, and then on Tuesday she uses two-thirds of what's left. How many yards of cloth will remain on Wednesday?

*Laurel will have  $\frac{1}{9}$  yard of cloth remaining on Wednesday.*