

Review 2A : Operations with Decimals and Fractions

1. Marco paid \$36.89 for 8.6 gallons of gas. What is the price of 1 gallon of gas?
A \$3.29 C \$4.09
B \$3.89 D \$4.29
2. The area of a rug is $36\frac{1}{4}$ square feet.
The rug is $8\frac{3}{4}$ feet long. What is the length of the rug?
A $4\frac{1}{7}$ C $4\frac{11}{12}$
B $4\frac{2}{3}$ D $27\frac{1}{2}$
3. A caterer prepared a turkey that weighed $27\frac{1}{2}$ pounds. Each serving of turkey will be $\frac{1}{3}$ pound. How many whole servings will the turkey provide?
A 70 C 82
B 79 D 159
4. You have two fractions with denominators of 3 and 10. What number should you use as the least common denominator if you want to add them?
A 3 C 15
B 10 D 30
5. Erin has $1\frac{7}{8}$ pounds of trail mix. She wants to make $\frac{1}{12}$ -pound bags of the mix for snacks. How many full bags can she make?
A 20 C 22
B 21 D 23
6. A bar of soap weighs 3.8 ounces. The ingredient glycerin makes up 0.4 of the weight of the soap. What is the weight of the glycerin in the bar of soap?
A 1.52 oz C 4.2 oz
B 3.8 oz D 15.2 oz
7. What is the reciprocal of $\frac{7}{12}$?
A $-\frac{7}{12}$ C $\frac{12}{7}$
B $-\frac{12}{7}$ D -7
8. Tyler wrote checks on his checking account for \$20.53, \$13.48, and \$19.40. He also deposited \$65.40 in the account. Which number describes the change in the balance of his account?
A \$ 11.99 C \$ 44.87
B \$ 31.39 D \$ 53.41
9. A swimming pool is 21.4 feet long and 12.75 feet wide. What area does the pool occupy?
A 8.65 ft² C 272.85 ft²
B 34.15 ft² D 2,728.50 ft²
10. How does finding the greatest common factor allow you to simplify $\frac{33}{55}$?
A Multiply the numerator and denominator by 11.
B Divide the numerator and denominator by 11.
C Add 11 to the numerator and denominator.
D Subtract 11 from the numerator and denominator.
11. What is the least common multiple you should use to find $\frac{4}{5} + \frac{5}{6}$?
A 15 C 30
B 20 D 60

12. In 12 hours, the temperature fell steadily from 17°F to 7°F . What was the average change in temperature per hour?

13. Tomas bought a bottle of shampoo that held 10.5 fluid ounces. He uses $\frac{1}{16}$ of the shampoo every time he washes his hair. How many ounces of the shampoo are left after he washes his hair 6 times?

14. Explain how to use the least common multiple to find $\frac{5}{9} - \frac{2}{15}$.

15. Write some multiples of 5 and 8. Use the least common multiple to simplify $\frac{120}{160}$.

16. Sanjay's dog weighs 46 pounds on Earth. Multiply the dog's Earth weight by 0.38 to find how much it would weigh on Mars, and by 2.36 to find how much it would weigh on Jupiter. How much less would the dog weigh on Mars than on Jupiter?

17. A straw for a box drink is $4\frac{1}{8}$ inches long and costs \$0.015 to make. The straws are laid end-to-end in a line until they extend $123\frac{3}{4}$ inches. How many straws are in the line and how much do they cost?

18. A bag of potatoes weighs $7\frac{1}{2}$ pounds.

Of the potatoes in the bag, $\frac{1}{6}$ are rotten.

What is the weight of the good potatoes?

19. Cereal costs \$2.79 for 16.4 ounces. At this rate how much does 25 ounces of cereal cost?

20. Describe the process of dividing a fraction by a fraction.

21. Chuck earned \$76 mowing lawns. The gas for the mower cost \$12 and he bought a new string for the trimmer for \$7. Write and find the value of an integer expression to find the amount of his profit.

22. a. Marge has $14\frac{2}{5}$ feet of chain. She wants to make pieces $\frac{3}{8}$ foot long. How many can she make?

- b. Solve the same problem using decimals. Show your work.
