Practice Quiz 1

1. Evaluate the expression.

(-20) ÷ (-5)
A. -5
B. -4
C. 4

- D. 5
- 2. Evaluate the expression.

3 × (4 - 2) + 8 ÷ 2 A. 15 B. 10 C. 9 D. 7

3. Evaluate the expression.

3²(6 - 7) + 10 ÷ 2 A. -4 B. ¹⁄₂ C. 29 D. 36

4. Which number is not a factor of 54?

A. 1

B. 2

C. 4

D. 6

5. Which number is not a multiple of 11?

A. - 121

- B. 0
- C. 11
- D. 131
- 6. What is the prime factorization of 99?
 - A. 9, 9
 - B. 9, 11
 - C. 3, 3, 10
 - D. 3, 3, 11
- 7. A designer is carpeting the upstairs of a house. One bedroom measures 10 x 13 square feet and another bedroom measures 15 x 12 square feet. If carpets cost \$9.64/square foot, and the designer does not need to factor in labor, how much will the project cost rounding up to the nearest whole dollar?
 - A. \$1, 300.00
 - B. \$3, 100.00
 - C. \$2, 989.00
 - D. \$1,800.00
- 8. Annually, Kayla pays \$144 for her make-up subscription, \$96 for her beauty product service, \$360 for her trips to the nail salon, and \$240 for her tanning salon package. How much money should Kayla budget monthly for her beauty regime?

- A. \$96.00
- B. \$84.00
- C. \$75.00
- D. \$70.00

Practice Quiz 1 — Answer Key

1. C. When dividing signed numbers, remember that if the dividend and divisor have the same sign, the quotient is positive. Other than the sign, the process is the same as dividing whole numbers. See Lesson: Standard Operations & Concepts.

2. B. Using the PEMDAS mnemonic, $3 \times 2 = 6$ is added to $8 \div 2 = 4$. 6 + 4 = 10. See Lesson: Standard Operations & Concepts.

3. A. Evaluating the expression using the order of operations, the expression can be rewritten as 9 \times -1 + 5. Completing the multiplication process first, -9 + 5 = -4. See Lesson: Standard Operations & Concepts.

4. C. A number is a factor of another number if the latter is divisible by the former. The number 54 is divisible by 1 because 54 \times 1 = 54, and it is divisible by 2 because 27 \times 2 = 54. Also, 6 \times 9 = 54. But 54 \div 4 = 13.5 (or 13^R2). Therefore, 4 is not a factor. See Lesson: Factors and Multiples.

5. D. Any product of a number and an integer is a multiple of that number. In the case of 11, only 131 is not a multiple. Note that the product of 11 and 11 is 121. Therefore, the next multiple is 132, not 131. See Lesson: Factors and Multiples.

6. D. Use a factor tree to find the prime factors of 99. The factors are 3, 3, and11. See Lesson: Factors and Multiples.

7. C. The total is \$2,989.00 because $(10 \times 13) + (15 \times 12) = 310$ square feet \times (\$9.64/sq foot) = \$2,988.40. The cost rounded up to the nearest whole dollar would be \$2,989.00. See Lesson: Standard Operations & Concepts.

8. D. Kayla should budget \$70.00 a month for her beauty regime because adding up her annual service totals and dividing the total by 12 provides her monthly costs. (\$144 + \$96 + \$360 + \$240) \div 12 = \$70.00. See Lesson: Factors and Multiples.



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