

Kennebec Valley Community College  
**Arithmetic**

**1. Subtract: 8.02 – 3.696**

- A) 4.498      B) 2.894      C) 4.324      D) 11.716

**2. 40 is what percent of 800?**

- A) 5%      B) 0.05%      C) 15%      D) 20%

**3. Divide 1.0698 / 0.001**

- A) 0.0010698      B) 1069.8      C) 10,069.8      D) 106.98

**4. A car traveled 200 mi. on 12½ gal. of gas. How many miles per gallon did it get?**

- A) 8      B) 16      C) 18      D) 16<sup>2</sup>/3

**5. Add and simplify :  $\frac{7}{10} + \frac{5}{8} + \frac{7}{20}$**

- A)  $\frac{47}{40}$       B) None of these      C)  $\frac{67}{40}$       D)  $\frac{179}{40}$

**6. Subtract:  $5\frac{7}{8} - 4\frac{5}{6}$**

- A)  $2\frac{17}{24}$       B)  $\frac{1}{24}$       C)  $1\frac{1}{24}$       D)  $9\frac{1}{24}$

**7. On a recent day the stock of Datatech opened at \$39¼ and rose \$2¾ in the course of the day. What was the closing price?**

- A) \$36½      B) \$38      C) \$42      D) \$41

**8. Multiply:  $4\frac{1}{2} \cdot \frac{1}{5}$**

- A)  $3\frac{3}{10}$       B)  $1\frac{4}{5}$       C)  $22\frac{1}{2}$       D)  $\frac{9}{10}$

**9. Divide and simplify:  $\frac{15}{2} \div 3$**

- A)  $\frac{5}{2}$       B)  $\frac{2}{5}$       C)  $\frac{45}{2}$       D)  $\frac{2}{45}$

**10. Divide  $6 \overline{)2455}$ . Write a mixed numeral for the answer.**

- A)  $411\frac{5}{6}$       B)  $49\frac{1}{6}$       C)  $51\frac{5}{6}$       D)  $409\frac{1}{6}$

11. A wheel on a bicycle makes  $71\frac{1}{4}$  revolutions per minute. If it rotates for 40 minutes, how many revolutions does it make?

- A)  $2840\frac{1}{4}$     B)  $1\frac{25}{32}$     C) None of these    D) 2850

12. Courtney ran the 100-meter relay in 21.4 seconds, and later ran the same distance in 16.7 seconds. By how much did she improve her time?

- A) 4.7 seconds    B) 38.1 seconds    C) 5.7 seconds    D) None of these

13. Solve:  $38.36 + x = 88.334$

- A) None of these    B) 84.498    C) 49.974    D) 126.694

14. Find decimal notation: 0.71%

- A) 0.071    B) 71    C) 0.71    D) 0.0071

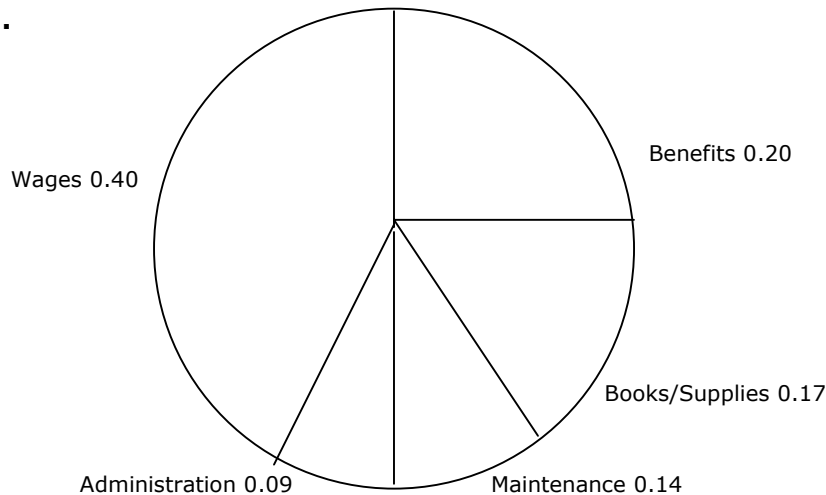
15. What is 60.5% of 80?

- A) 0.13    B) 484    C) 4.84    D) 48.4

16. In one year, the population of Elm Town increased from 900 to 981. What was the percent of increase?

- A) 9%    B) 1.09%    C) 0.917%    D) 8.257%

17. This circle graph shows how each tuition dollar is spent by the Oaks School.



How much of each dollar is left after expenses for wages have been paid?

- A) \$0.70    B) None of these    C) \$0.55    D) \$0.75

18. Solve:  $12.2 = p - 8.6$

- A) 20.8    B) -104.92    C) 3.6    D) None of these

19. Solve:  $\frac{3}{4}x = \frac{1}{2}$

- A)  $\frac{3}{8}$     B)  $\frac{2}{3}$     C) None of these    D)  $\frac{1}{6}$

20. When 10 is subtracted from two times a certain number, the result is twenty-eight (28). What is the number?

- A) 17    B) 19    C) None of these    D) 22

- 21. A pharmacist has 100 ml of a solution of alcohol and water; 5% is alcohol. How many milliliters are alcohol?**  
A) 20 ml    B) 2000 ml    C) 5 ml    D) 95 ml
- 22. A student's college tuition is \$6300. A loan was obtained for  $\frac{6}{7}$  of the tuition. How much was the loan?**  
A) \$700    B) \$5400    C) \$37,800    D) \$900
- 23. The regular price of a suit is \$120. It is on sale at 19% off. What is the discount?**  
A) \$19.00    B) \$101.00    C) \$97.20    D) \$22.80
- 24. Approximate  $\sqrt{15}$  to three decimal places.**  
A) 225    B) 7.500    C) 3.873    D) 3.742
- 25. What is the cost of 5 CD's at \$16 each and 7 videotapes at \$24 each?**  
A) \$80    B) \$248    C) \$228    D) \$168

Answers:

1. C
2. A
3. B
4. B
5. C
6. C
7. C
8. D
9. A
10. D
11. D
12. A
13. C
14. D
15. D
16. A
17. B
18. A
19. B
20. B
21. C
22. B
23. D
24. C
25. B