

 Module Test **B** **Module 1** 

Solve each of the following. Show your work.

1. $14 - 6 \times 2$

2. $7 + (5 - 3) - 1$

3. $8^2 - (3^3 + 5)$

4. $[12 \div 4 + 2] \times 5$

5. $5 + 8^2 - 9(6 - 4)$

6. $2^3 + 45 - [7 + 9 \times 3] - 1$

Determine if each number is divisible by 2, 3, 4, 5, 6, 9, or 10. List all the numbers each number is divisible by on the answer line provided. If the number is not divisible by any of the numbers, write “none” on the answer line provided.

7. 512 _____

8. 10,980 _____

9. 46,231 _____

10. 2,080 _____



Circle the correct response for each problem.

11. Estimate using front-end estimation without rounding: Pedro purchases a television for \$178 and a DVD player for \$165. About how much does he pay for both items?
- a. \$200 b. \$300 c. \$343 d. \$350
12. Round to the nearest hundred: 21,950.
- a. 21,000 b. 21,900 c. 22,000 d. 22,050
13. Estimate using front-end estimation with rounding to the nearest ten: $347 + 274$.
- a. 500 b. 600 c. 620 d. 630
14. Which is the smallest number divisible by 2, 3, 4, 5, 6, and 10?
- a. 60 b. 135 c. 180 d. 270
15. In the expression $6 \times 45 - [(8 - 2) + 3 \times 7] + 4^3$, which calculation is performed first?
- a. 6×45 b. 3×7 c. 4^3 d. $8 - 2$
16. Which of the following can be used to calculate $(14)(16)$:
- a. $(14)(20) - (14)(6)$ b. $(14)(20) - (14)(4)$ c. $(16)(10) - (16)(4)$ d. $(16)(10) - (16)(6)$

Name the property represented by each equation.

17. $5(14 + 3) = (5)(14) + (5)(3)$ _____

18. $(32 \times 6) \times 4 = (6 \times 32) \times 4$ _____

19. $43 + 0 = 43$ _____

20. $(5 + 15) + 6 = 6 + (5 + 15)$ _____

21. $3(9 - 7) = (3)(9) - (3)(7)$ _____

22. $(85 + 12) + 14 = 85 + (12 + 14)$ _____

23. $1 \times 321 = 321$ _____

Answer the following questions in the space provided.

24. Solve $25 \times (182 \times 4)$ using mental math and give a reason for each step.

25. Explain compatible numbers and then use compatible numbers to estimate the quotient $732 \div 53$.

