

Solve each of the following. Show your work.

1. $23 - 7 \times 3$ **2.** 10 + (6 - 4) - 2

3. $6^2 - (2^3 + 4)$ **4.** $[20 \div 5 + 8] \times 10$

5. $9 + 7^2 - 3(8 - 1)$ **6.** $3^2 + 40 - [8 + 5 \times 2] - 4$

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.	836	
8.	52,331	
9.	1,080	
10.	11,150	

Circle the correct response for each problem.

11.	Estimate using front-end estimation with rounding to the nearest hundred: Pedro purchases a television for \$178 and a DVD player for \$165. About how much does he pay for both items?					
	a. \$343	b. \$300	c. \$350	d. \$400		
12.	Round to the nearest thousand: 34,950.					
	a. 34,000	b. 34,900	c. 35,000	d. 35,900		
13.	Estimate using front-end estimation without rounding: 347 + 274.					
	a. 500	b. 600	c. 621	d. 630		
14.	Which is the smallest number divisible by 2, 3, 5, 6, 9, and 10?					
	a. 60	b. 90	c. 180	d. 270		
15.	In the expression $4 \times 37 - [2 \times 5(7 - 4)] + 5^2$, which calculation is performed first					
	a. 4 × 37	b. 2 × 5	c. 5 ²	d. 7 – 4		
16.	Which of the following can be used to calculate (12)(18):					
a. (1	2)(20) - (12)(8)	b. (18)(10) – (18)(2)	c. (12)(20) – (12)(2)	d. (18)(10) – (18)(8		

Name the property represented by each equation.

17.	$185 \times 2 = 2 \times 185$	
18.	16(10 - 7) = (16)(10) - (16)(7)	
19.	$88 \times 0 = 0$	
20.	4(8+6) = (4)(8) + (4)(6)	
21.	$(5 \times 15) \times 6 = 5 \times (15 \times 6)$	
22.	(22+8)+4=(8+22)+4	
23.	175 + 0 = 175	

Answer the following questions in the space provided.

24. Solve $(25 \times 213) \times 4$ using mental math and give a reason for each step.

25. Explain compatible numbers and then use compatible numbers to estimate the quotient $819 \div 47$.

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