NAME _____ DATE _____ PERIOD _____

Test, Form 3A

What is the value of each expression?

1. $10(17 - 4) - 3(8 + 4)$ — **1.** **94**

2. $4[2(6 \cdot 4) - 8 \cdot 6]$ — **2.** **0**

3. Ross purchased 4 notebooks for \$1.29 each and 3 boxes of markers for \$0.89 each. Write and then evaluate an expression for the total cost of the school supplies. — **3.** **4(1.29) + 3(0.89); \$7.83**

For Exercises 4 and 5, what property can be used to prove that the statement is true?

4. $(9 + 7) + 3 = 3 + (9 + 7)$ — **4.** **Commutative (+)**

5. $4 \cdot (5 \cdot 6) = (4 \cdot 5) \cdot 6$ — **5.** **Associative (×)**

6. Is the following statement true or false? Explain your reasoning.

$$\frac{(16 + 4)}{2} = \frac{1}{2}(16 + 4)$$

6. **Yes; dividing a quantity by 2 is equivalent to multiplying the quantity by $\frac{1}{2}$.**

7. Is the conjecture, *a multiples of 5 end in a zero*, true? If not, give a counterexample. — **7.** **No; sample answer: 15**

8. The table shows the number of successful field goals made at various distances from the goal posts. What is the range of the relation?

Distance (yd)	Field Goals
20 or less	67
25	55
30	47
35	40
40	33
more than 45	20

8. **{20, 33, 40, 47, 55, 67}**

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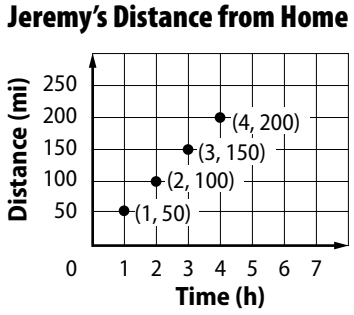
Test, Form 3A *(continued)*

9. The graph shows Jeremy's distance from home as it relates to his time spent driving. How many miles will he be from home after 10 hours.?



9. 500 mi

10. If a line passes through (0, 0), (1, 3) and (2, y), what is y?

10. 6

11. Describe the graph of all possible points, (x, y) if $y = 0$.

11. The graph is the x-axis.

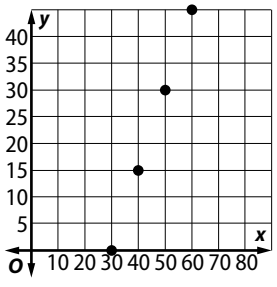
12. Rectangle $ABCD$ has vertices $A(3, 2)$, $B(5, 2)$, and $C(5, 5)$. What are the coordinates of point D?

12. (3, 5)

13. Evan had 65 baseball cards. He traded 4 cards for 3 from Alyce. He traded 9 more for 4 from Leo and 8 for 2 from Bret. Finally, he traded 15 cards for 18 from Mollie. How many cards does Evan have now? What method did you use?

13. 56; Sample answer: I subtracted the total number he gave away (36) and then added the total number he got back (27).

14. Can you devise a plan for finding the domain and the range of the relation shown in the graph? Explain.



14. domain: {30, 40, 50, 60}; range: {0, 15, 30, 45}; Sample answer: I labeled the coordinates of each point and then listed all the x-values for the domain and all the y-values for the range.