NAME _____ DATE _____ PERIOD _____

Accelerated Math 7 Chapter 7 Practice Test

1. Which expression is equivalent to $4(15 - 7)$? **A.** $(15 + 4) - (7 + 4)$ **C.** $15(4) - 7(4)$ **B.** $(15 - 7) + (15 - 4)$ **D.** $4(15) + 4(7)$	1.
2. Which of the following expressions can be written as $10(x - y)$? **A.** $10x \cdot 10y$ **C.** $10x \cdot (-y)$ **B.** $10xy - 10yx$ **D.** $10x - 10y$	2.
3. On a school trip to the space museum, 30 students visited the astronaut exhibit. Tickets for admission cost $18. Which expression can be used to mentally compute the total cost of admission tickets? **A.** $30(10 + 8)$ **C.** $15(2 + 8)$ **B.** $15 \cdot 2 + 10 \cdot 8$ **D.** $30(10 - 8)$	3.
4. Identify the like terms in the expression $7x + 4y + 3y + 7$. **A.** $7x$ and 7 **B.** $4y$ and $3y$ **C.** 7 **D.** 7, 4, and 3	4.
5. The area of a triangle can be determined by $\frac{1}{2}bh$, where b is the length of the base and h is the height. What is the coefficient in the expression $\frac{1}{2}bh$? **A.** b **B.** h **C.** $\frac{1}{2}$ **D.** 1	5.
6. Which of the following expressions correctly combines like terms? **A.** $4x + 7 + 2x - 4y = 6x + 3y$ **B.** $2x + 7y + 2x - 4y = 4x + 3y$ **C.** $2x + 7y + 2x - 4 = 4x + 3y$ **D.** $4x + 7y + 2x + 4y = 6x + 3y$	6.
7. Mateo and Haley both collect coins. Mateo has 8 more coins in her collection than Haley. Which expression represents the total number of coins in both collections? **A.** $2c + 8$ **B.** $c + 8$ **C.** $2c(8)$ **D.** $8 - 2c$	7.
8. Bradley rents a fishing boat for the day. The total cost for gasoline is represented by the expression $3.25m + 15$. What is the constant in the expression? **A.** 3.25 **B.** 15 **C.** m **D.** $3.25m$	8.
9. What is the GCF of $100xyz$ and $25xz$?	9.

10. A triangle has side lengths of $(4x - 10)$ units, $(2x + 6)$ units, and $5x$ units. Which expression represents the perimeter of the triangle?

A. $(11x + 16)$ units

B. $(6x - 4 + 5)$ units

C. $(11x - 4)$ units

D. $(14x + 8x + 5x)$ units

10.

11. The expression $(2.2x + 8)$ represents the number of miles Trent jogged during a race, and $5x$ represents the number of miles that Ling jogged during the same race, in x hours. Write an expression to show how many more miles Ling jogged than Trent.

11.

12. Rewrite the following expression using the Distributive Property.

$13 \cdot (-16) + 14 \cdot 16$

12.

13. The width of a rectangle is $4x$ units and its length is $(6x - 2)$ units. What happens to the area of the rectangle if the length is doubled?

13.

14. Write an expression in factored form that is equivalent to the expression $\frac{3}{4}x + 24$.

14.

An animal hospital provides aid to sick and injured sea turtles. The cost of visiting the hospital for x number of visitors is shown in the table.

Admission Cost	
Admission Ticket	**Cost ($)**
weekday	$7.50x + 5$
weekend	$15x + 10$

15. Write an expression in factored form that is equivalent to the sum of weekday and weekend tickets.

15.

16. Write an expression to show how much greater the cost is for a weekend ticket than a weekday ticket.

16.

17. The perimeter of a square-shaped garden is $(12x + 20)$ feet. Write an expression to represent the length of one side of the garden.

17.

18. Which expression in factored form is equivalent to $\frac{1}{5}x + 10$?

A. $\frac{1}{5}(x + 50)$

B. $5(x - 10)$

C. $\frac{1}{5}(10x + 50)$

D. $5(10x - 5)$

18.