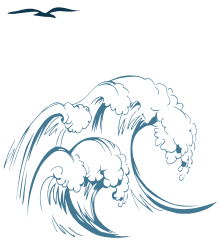
Name _____ Date Answer Key

A Day at the Beach: Identifying and Writing Equivalent Expressions



Emery, Ari, Paul, and Connor are planning a beach day! For the problems below, circle each expression that represents the given situation. There may be more than one in each problem. Then, write another different expression that represents the situation.

1. Emery is buying a new bathing suit before going to the beach. The price of the bathing suit is p dollars, and the sales tax rate is 5%. Circle all of the expressions that represent the total cost of the bathing suit, including tax.

$p + 0.5p$	(1.05p)	$p - 0.05p$

Write another expression to represent the situation: *Sample answer:* $p + 0.05p$

2. It takes h hours to drive from Emery's house to the beach. The friends plan to drive from Emery's house to the beach, spend 4 hours there, and then drive back to her house. Circle all of the expressions that represent how many hours the entire trip will take.

(2h + 4)	$h + 4$	($h + 4 + h$)

Write another expression to represent the situation: *Sample answer:* $h + h + 4$

3. While walking on the boardwalk near the beach, Connor buys a box of saltwater taffy filled with his 3 favorite flavors. There are t pieces of each flavor in the box. He shares the taffy equally between himself and his 3 friends. Circle all of the expressions that represent the number of pieces of taffy each friend gets.

($t + t + t$) ÷ 4	$3t \div 3$	$12t$

Write another expression to represent the situation: *Sample answer:* $3t \div 4$

4. The Boardwalk Breeze Food Truck sells a basket of french fries for f dollars, a bag of popcorn for $3.50, and a soft pretzel for $1.00. Emery and Ari each buy french fries, Paul buys popcorn, and Connor buys a soft pretzel. Circle all of the expressions that represent the total amount the friends spent at the food truck.

$4.50f$	($f + f + 4.50$)	$f + 3.50 + 1$

Write another expression to represent the situation: *Sample answer:* $2f + 4.50$

5. The friends buy 4 souvenirs to remember their day at the beach. Each souvenir costs s dollars, and Ari has a coupon for 30% off the total cost. Circle all of the expressions that represent how much the souvenirs cost after using the coupon.

$4s - 0.3$	($4s \cdot 0.7$)	($4(s - 0.3s)$)

Write another expression to represent the situation: *Sample answer:* $4(0.7s)$