**Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Per.\_\_\_\_\_\_\_ Score:\_\_\_\_\_**

**U1 HW #5** *Translating and Writing Expressions*

1. **Directions:** Write an algebraic expression to match each verbal expression.

|  |  |  |
| --- | --- | --- |
| The quotient of 54 and x | Twenty two decreased by a number | Twice the sum of seven and a number |
| The product of eight and a number  | A number increased by one half | The sum of twice a number and negative three |

1. Dan’s basketball coaches have set up the following schedule for practice: 10 minutes of warm-up and stretching; 15 minutes of defensive drills; 10 minutes of passing drills; 20 minutes of shooting practice, and *x* minutes of time to scrimmage.
	1. Circle the expression(s) below that represent the amount of time Dan will practice **each week** if they practice **3 days a week**. *There may be more than one answer.*
	2. If Dan’s team scrimmages for 35 minutes each practice, how long is **each** practice? Show your thinking.
	3. How long do they practice **each week** (again assuming they practice 3 days a week)? Show your thinking.
2. Use the story below about Chloe and her friends to answer the questions that follow.

Going on a Picnic:

**Story**

Cost of a sandwich: *\_\_\_\_\_\_\_\_*

**Chloe and her friends are going on a picnic. A sandwich is 6 times the cost of a cookie. A bag of chips is one and a half times the cost of a cookie. A soda is twice the cost of a cookie.**

Cost of a bag of chips: \_\_\_\_\_\_\_\_

Cost of a cookie: \_\_\_***x***\_\_\_\_\_

Cost of a soda: \_\_\_\_\_\_\_

* 1. Write expressions for the cost of each item on the lines provided above if the cost of a cookie is *x*.
	2. If a cookie costs $0.50, what are the cost for each of the other items? Show how you know each cost and write the answer on the lines below.

 **Sandwich:** \_\_\_\_\_\_\_\_ **Bag of chips:** \_\_\_\_\_\_\_\_ **Cookie:** \_\_\_\_\_\_\_\_ **Soda: \_\_\_\_\_\_\_\_**

1. Use the expressions and start of a story to complete a - c.

**Story**

Birthday Parties

Donavan is planning his birthday party. He can choose Boondocks or Lagoon.

Number of people at a birthday party:

Cost of party at Boondocks:

Cost of party at Lagoon:

* 1. What does the expression for Boondocks represent?
	2. What does the expression for Boondocks represent?
	3. Write a story that matches the expressions on the lines above.