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

**U1 HW #6** *Translating and Writing Equations*

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

|  |  |  |
| --- | --- | --- |
| The quotient of 54 and x is negative thirty-seven. | Twenty two decreased by a number equals eleven. | Twice the sum of seven and a number gives you ten. |
| The product of eight and a number is eighty.  | A number increased by one half is six. | The sum of twice a number and negative three results in a value of four. |

1. Use the incomplete story and the expressions and equation below to answer the questions that follow.

**Story**

Triangles

**In , the measure of is three times larger than…**

**The measure of is less than…**

**The sum of the angles in a triangle is…**

**What is the measure of each angle in the triangle?**

1. Finish the story above so that it matches the expressions and equation shown on the left.
2. What is the measure of each angle in the triangle? Show each step you use to solve this problem.

1. Use the story below about Sanjeet and his friends’ end-of-season basketball statistics to answer the questions that follow.

**Story**

Points Scored

**Sanjeet and his team members were looking at the total points score by each player during the season. Sanjeet scored twice the number of points that Terrence did. Cole scored 12 more points than Sanjeet. Together the boys scored 992 points during the season.**

Terrence’s points: *\_x\_\_*

Sanjeet’s points:

Cole’s points: \_\_\_\_\_\_\_\_

1. Write expressions in the spaces provided above for the total points scored by each player during the season if Terrence scored *x* points.
2. Write an equation that represents this situation.

**Equation: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

1. Solve your equation to determine the number of points scored by each boy during the season.

 **Cole:** \_\_\_\_\_\_\_\_ **Terrence:** \_\_\_\_\_\_\_\_ **Sanjeet:** \_\_\_\_\_\_\_\_\_

1. Write the story that goes with the expressions and equation in each problem. Solve for the unknown information and interpret your answer.

**Story**

Fixing Your Car

Time (hours):

Cost of Mike’s Mechanics:

Cost of Bubba’s Body Shop:

* 1. Write a story that matches the expressions and equations above. Add details.
	2. Solve the equation for h.
	3. **Interpret your answer.** What does your answer mean in this situation?