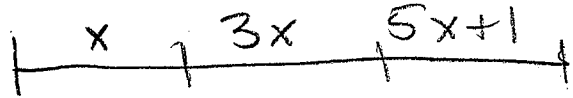Group Members_____

1. A 25 inch piece of steel is cut into three pieces so that the second piece is three times as long as the first, and the third piece is one inch more than five times the length of the first piece. Find the length of the pieces and draw a picture[1].

$$\frac{8}{3} \text{in}, \; 8 \text{in}, \; \frac{43}{3} \text{in}$$

$$\longmapsto\!\!\underset{x}{}\!\!\underset{3x}{}\!\!\underset{5x+1}{}\!\!\longmapsto$$

2. The measures of the angles of a triangle are 3 consecutive even integers. Find the measure of each angle.

$$58°, \; 60°, \; 62°$$

3. The gas gauge in Sarita's car is broken. She knows her car has a range of 345 miles on a full tank. If she ran out of gas after 300 miles, how much fuel did she have when she left? (In terms of a tank; e.g. $\frac{3}{4}$ of a tank.)

$$\frac{20}{23} \text{ of a tank}$$

4. The measures of the angles of a particular triangle are such that the second and third angles are each four times larger than the first angle. Find the measures of the angles of this triangle.

$$20°, \; 80°, \; 80°$$

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[1]Adapted from Beginning Algebra by Elayn Martin-Gay