Possible Solutions

a) Students can choose to determine the rate at which Sandra and Ben each used gasoline and compare using a unit rate for each.
1. Calculate Sandra's rate of gas usage: 90 miles: 6 gallons
2. Calculate Ben's rate of gas usage: 135 miles: 9 gallons
3. Reduce each to the unit rate and compare: 90 ÷ 6 = 15:1. The unit rate for Sandra's gas usage is 15 miles per gallon. 135 ÷ 9 = 15:1. The unit rate for Ben's gas usage is 15 miles per gallon.
4. Yes, Sandra and Ben used gasoline at the same rate, so Sandra is correct.

b) Students may also choose to set the problem up as the comparison of 2 rates using an equivalency equation:

$$\frac{90}{6} = \frac{135}{9}$$

1. Next, students will simplify each side of the equation. 90 ÷ 6 = 15 and 135 ÷ 9 = 15.
2. Then, they will compare using the same equation: 15 = 15.
3. Yes, Sandra and Ben used gasoline at the same rate, so Sandra is correct.