Modeling and Solving One-Step Equations Homework (+/-/x/÷)

Part I Directions:
1) Write an equation for each of the models below.
2) Answer the question, “How do you isolate the variable?”
3) Then, demonstrate on the model. Find $x$.

<table>
<thead>
<tr>
<th>Equation:</th>
<th>How do you isolate the variable?</th>
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<td>$x \times x \times x$</td>
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Part II Directions: Make a model for the following equation below. Then, solve for $x$.

$$4x = -20$$
Part 3 Directions: Solve the following one-step equations. SHOW YOUR WORK!

Note: Your answer may be a fraction. DO NOT write any answers as a decimal.

1. \(5x = 50\)  
2. \(-3x = 33\)  
3. \(x + 5 = 27\)  
4. \(\frac{a}{9} = 6\)  
5. \(\frac{y}{-6} = -4\)  
6. \(b - (-12) = 24\)  
7. \(-8x = -64\)  
8. \(c - 94 = 100\)  
9. \(\frac{x}{-3} = -15\)  
10. \(f + (-13) = 44\)  
11. \(15y = -3\)  
12. \(x - \frac{3}{5} = \frac{1}{5}\)