Compensation

Mental Math Strategy

***When** to use this strategy:* Use this strategy when you can change one number to a convenient value.
***How** to use this strategy:* To use this strategy change one number to a convenient value (usually by making it bigger--adding), do the operation, and then compensate (usually by subtracting) to get the answer.

Examples: 65 + 38 = 65 + 40 – "compensation" = 105 – 2 = 103.
18 × 5 = 20 × 5 – "compensation" = 20 × 5 – 2 × 5 = 100 – 10 = 90.

Use this (new) strategy on the following:	
1.) Solve $\frac{x}{19} = 6$	2.) What is the total cost of a Meal Deal for $4.80 and a dessert for $1.99?
3.) Simplify $y^{17} \cdot y^{29}$	4.) If $f(x) = 2x + 29$, find $f(7)$.

Use any strategy you know on the following:	
5.) Julie is finding the equation of a line through the point (47, 81). Her answer is $y = x + 38$. Is her equation correct?	6.) A Horseback riding club, which has 25 members, goes horseback riding for 4 days. The cost per person each day is $27.60. What is the total cost for the club?
7.) If you start with $8.90 and spend $2.20, how much is left?	8.) Solve $x - 25 - 83 = 75$