1. Simplify $4 - \left| \left| 2^2 - (-2)^4 \right| - 5^2 \right| =$

2. Evaluate the expression $6x^2 - 4x + 1$ if

   (a) $x = 0$

   (b) $x = 4$

   (c) $x = \dfrac{1}{2}$

   (d) $x = -\dfrac{1}{2}$

3. Solve each of the following equations. Make sure to check your solution.

   (a) $\dfrac{2}{3}x + \dfrac{3}{5} = -\dfrac{1}{15}$

   (b) $5x - 3 = x + 9$

   (c) $-x + 13 = 2x + 1$

   (d) $\dfrac{2x - 1}{7} = -3$

   (e) $\dfrac{x}{7} - 1 = -3$

   (f) $-7x - 1 = 3x - 21$

4. What fraction of $2\dfrac{1}{8}$ is $\dfrac{1}{4}$?

5. 3.45 times what number is 4.14?

6. Eighty-seven percent of 300 is what number?

7. One hundred thirty percent of what number is 78?

8. Fifteen percent of what number is 10.5?

9. What percent of 450 is 288?

10. What percent of 460 is 1150?

11. Three hundred forty-seven percent of what number is 2429?

12. Fifteen percent of the town's population are students. If there are 1800 students living in the town, how many people live there?

13. Paul earned $ 128 this week in his part time job. If this was a sixty percent increase from last week, how much money did he make last week?

14. A TV went on a 14% sale. The sale price is $ 412.8. Find the original price of the TV.

15. Overnight, the number of bacteria increased by one hundred sixty percent.   There are now 650000 bacteria. How many was there yesterday?

16. Susan has a new job to distribute flyers. Every day she earns $ 10 and an additional 5 cents per flyers distributed.

    (a) Express Susan's daily income in terms of n, where n is the number of flyers she distributes a day.

    (b) How much money does she make a day if she distributes 500 flyers?

    (c) How many flyers does she need to distribute a day in order to make $50?