Intro to Statistics
Foundational Mathematics - Assignment #7

1. What is the percentage of increase from 10 to 17.

2. What is the percentage of decrease from 20 to 11.

3. What is the percentage of decrease from 50 to 30.

4. What is the percentage of decrease from 40 to 10.

5. What is the percentage of decrease from 80 to 60.

6. What is the percentage of increase from 30 to 36.

7. The cost of an afternoon movie ticket last year was $4.00. This year an afternoon movie ticket costs $5.00. What is the percent increase of the ticket from last year to this year?

8. The weekly sales of a magazine increased from 500,000 to 600,000. By what percentage did the magazine sales increase?

9. On Monday, Lisa's fish bowl contained 1 gallon of water. On Friday, the fish bowl contained 0.75 gallon of water. By what percentage did the amount of water in Lisa's fish bowl decrease?

10. Traditions Clothing Store is having a sale. Shirts that were regularly priced at $20 are on sale for $17. What is the percentage of decrease in the price of the shirts?

11. A boxing bag at Sports Chalet that costs $160.00 is on sale for 35% off. If Max buys the boxing bag, how much will he be saving?

12. A dress shirt that regularly sells for $54.00. is on sale for 25% off. What is the sale price of the dress shirt?

13. A salesperson at a clothing store earns 4% commission on all sales. How much commission does the salesperson earn on a $210 sale?

14. Kevin bought a motorcycle for $2,600 and later sold it for a 20% profit. How much did Kevin sell the motorcycle for?

15. Jose has $1,800 dollars in a Chase bank account. Each year the account earns 4% simple interest. How much interest will be earned in 2 years?

16. Kimberly has $3,000 in a Bank of America bank account. Each year the account earns 5% simple interest. How much money will she have in her account after 4 years?

17. Nancy bought 4 bags of Fritos for $5.04. How much did each bag cost?

18. At the market Mark bought three boxes of Cocoa Pebbles. If each box costs $3.43, how much did Matt pay for all three boxes.

19. At the market, Andray bought two pineapples and three watermelons. If a pineapple costs $1.28 and a watermelon costs $1.67, then how much did Andray pay for all the fruit?

20. The Playstation 3 console costs $300, a controller $45, and a game $60. How much does the Playstation 3 console, with four controllers, and three games cost?

Write the equivalent fraction, decimal, and/or percentage.

21. $\dfrac{4}{5}$

    P:

    D:

22. 65%

    D:

    F:

23. .02

    P:

    F:

24. .9

    P:

    F:

25. 4%

    D:

    F:

26. $\dfrac{7}{9}$

    D:

    P:

Simplify.

27. $\dfrac{3}{4}+\dfrac{1}{7}$

28. $\dfrac{5}{6}\cdot\dfrac{2}{7}$

29. $\dfrac{3}{7}\cdot 3$

30. $\dfrac{4}{9}\div\dfrac{5}{9}$

31. $\dfrac{1}{2}\div 5$

32. $\left(\dfrac{3}{4}-\dfrac{1}{2}\right)+\dfrac{1}{6}$

33. $-8-11$

34. $(-8)(-11)$

35. $20.4\div1.7$

36. $(-23)+(-18)$

37. $18+(-9)$

38. $\dfrac{-6}{-54}$

39. $(-2)(-9)(-4)$

40. $(-6)+(-17)+(-5)$

41. $-63\div(-7)$

42. Chelsea is baking cinnamon rolls. The recipe calls for $\dfrac{2}{3}$ cup sugar. If Chelsea wants to make 3 times the recipe, how much sugar will she need to use.

43. The temperature at the beginning of the day is 53° F and drops to −4° F by midnight. How many degrees did the temperature drop?

Write in standard form.
44. 9.08×10^{-5}

Write in standard form.
45. 1.01×10^{4}

Write in scientific notation.
46. .00000765

Write in scientific notation.
47. $6,034,000$

Answer Key:

1) 70%   **2)** 45%   **3)** 40%   **4)** 75%   **5)** 25%   **6)** 20%   **7)** 25%   **8)** 20%
9) 25%   **10)** 15%   **11)** $56.00   **12)** $40.50   **13)** $8.40   **14)** $3,120.00   **15)** $144.00
16) $3.600.00   **17)** $1.26   **18)** $10.29   **19)** $7.57   **20)** $660.00   **21)** P:80% D:.8
22) D:.65 F:$\dfrac{13}{20}$ **23)** P:2% F:$\dfrac{1}{50}$ **24)** P:90% F:$\dfrac{9}{10}$ **25)** D:.04 F:$\dfrac{1}{25}$ **26)** D:.77 P:77%
27) $\dfrac{25}{28}$ **28)** $\dfrac{5}{21}$ **29)** $1\dfrac{2}{7}$ **30)** $\dfrac{4}{5}$ **31)** $\dfrac{1}{10}$ **32)** $\dfrac{5}{12}$ **33)** −19   **34)** 88   **35)** 12   **36)** −41
37) 9   **38)** $\dfrac{1}{9}$ **39)** −72   **40)** −28   **41)** 9   **42)** 2   **43)** 57°F   **44)** .0000908   **45)** 10,100
46) 7.65×10^{-6} **47)** 6.034×10^{6}