

Intro to Statistics

Foundational Mathematics - Review

1. LeBron James makes 7 of his 10 free throws in a basketball game, what is his free throw shooting percentage?
2. Jake has read 90 of the 200 pages from the book Lord of the Flies. What percentage of the book does he still have to read?
3. The cost of an afternoon movie ticket last year was \$5.00. This year an afternoon movie ticket costs \$8.00. What is the percent increase of the ticket from last year to this year?
4. The weekly sales of the Popular Science magazine increased from 600,000 to 1,000,000. By what percentage did the magazine sales increase?
5. On Monday, Lisa's fish bowl contained 2 gallon of water. On Friday, the fish bowl contained 1.2 gallon of water. By what percentage did the amount of water in Lisa's fish bowl decrease?
6. Forever 21 Clothing Store is having a sale. Jeans that were regularly priced at \$25 are on sale for \$18. What is the percentage of decrease in the price of the jeans?
7. A surf board at Sports Chalet that costs \$430.00 is on sale for 35% off. If Max buys the surf board, how much will he be saving?
8. A polo shirt that regularly sells for \$38.00. is on sale for 40% off. What is the sale price of the polo shirt?
9. A salesperson at a clothing store earns 3% commission on all sales. How much commission does the salesperson earn on a \$390 sale?
10. Kevin bought a truck for \$3,600 and later sold it for a 30% profit. How much did Kevin sell the truck for?
11. Jose has \$4,000 dollars in a Chase bank account. Each year the account earns 5% simple interest. How much interest will be earned in 4 years?
12. The X-Box console costs \$250, a controller \$50, and a game \$55. How much does the X-Box console, with four controllers, and two games cost?
13. Jennifer bought 2 bags of Potato Skins for \$3.36. How much did each bag cost?
14. At the market Mark bought three boxes of Honey Comb cereal. If each box costs \$4.92, how much did Mark pay for all three boxes.

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

15. $\frac{3}{4}$

16. 45%

17. .02

P:

D:

P:

D:

F:

F:

18. .8

19. 1%

20. $\frac{4}{9}$

P:

D:

D:

F:

F:

P:

Simplify.

21. $\frac{2}{3} + \frac{4}{5}$

22. $\frac{6}{5} \cdot \frac{5}{3}$

23. $\frac{5}{6} \cdot 3$

24. $\frac{5}{9} \div \frac{1}{3}$

25. $\frac{2}{7} \div 3$

26. $\frac{5}{6} + \left(\frac{1}{3} - \frac{1}{5}\right)$

27. $-8 - 7$

28. $(-8)(-7)$

29. $(-63) + (-18)$

30. $18 + (-25)$

31. $(-3)(-4)(-9)$

32. $(-3) + (-4) + (-9)$

33. $\frac{-9}{72}$

34. $-132 \div 12$

35. $28.8 \div 1.6$

36. $19.7 \div .05$

37. $104.06 + 13.3$

38. 14.54×3.7

39. Chelsea is baking Chocolate Chip cookies.

The recipe calls for $\frac{3}{4}$ cup flour. If Chelsea wants to make 3 times the recipe, how much flour will she need to use.

40. The temperature at the beginning of the day is

61° F and drops to -6° F by midnight. How many degrees did the temperature drop?

Write in standard form.

Write in standard form.

Write in scientific notation.

Write in scientific notation.

41. 5.63×10^5

42. 7.02×10^{-5}

43. .0000658

44. 81,200,000

Answer Key:

1) 70% 2) 55% 3) 60% 4) 66% 5) 40% 6) 28% 7) \$150.50 8) \$22.80

9) \$11.70 10) \$4,680.00 11) \$800.00 12) \$560.00 13) \$1.68 14) \$14.76

15) P: 75% D: .75 16) D: .45 F: $\frac{9}{20}$ 17) P: 2% F: $\frac{1}{50}$ 18) P: 80% F: $\frac{4}{5}$ 19) D: .01 F: $\frac{1}{100}$

20) D: .44 P: 44% 21) $1\frac{7}{15}$ 22) 2 23) $2\frac{1}{2}$ 24) $1\frac{2}{3}$ 25) $\frac{2}{21}$ 26) $\frac{29}{30}$ 27) -15 28) 56

29) -81 30) -7 31) -108 32) -16 33) $-\frac{1}{8}$ 34) -11 35) 18 36) 394 37) 117.36

38) 53.798 39) $2\frac{1}{4}$ 40) 67°F 41) 563,000 42) .0000702 43) 6.58×10^{-5} 44) 8.12×10^7