Arithmetic Placement Test Study Guide: Level 1

1. Find the quotient and remainder: $2453 \div 12$

2. One publisher sold 11,981 books in January; 5,489 books in February; and 8,531 books in March. To the nearest thousand, how many books did the publisher sell in the first quarter?

3. Scott Dixon has 40 minutes to run 64 laps at Limerock. On average, how many laps should he run every 10 minutes to complete the task?

4. Divide 716 by 48. Give your answer as a mixed number.

5. Lisa bought 60 lbs of cherries.   She used $\frac{1}{4}$ of the cherries in a fruit salad and $\frac{1}{3}$ of those left for fruit punch. How many pounds of cherries were left over?

6. Simplify: $\frac{1}{3} + \frac{5}{6} - \frac{8}{12}$

7. What is the area of a rectangle with base $3\frac{1}{3}$ yds and height $1\frac{2}{7}$ yds?

8. Divide. $5\frac{2}{5} \div 2\frac{1}{10}$

9. Sam bought $8\frac{2}{5}$ pounds of sliced turkey. If he puts $\frac{3}{10}$ lbs. of turkey on each sandwich, how many sandwiches can he make?

10. Add: a) $\frac{3}{4} + \frac{2}{3}$ b) $17\frac{4}{9} + 12\frac{5}{6}$

11. Add: $49\frac{6}{7} + 64\frac{5}{14}$

12. Subtract: $18\frac{1}{3} - 5\frac{7}{12}$

13. Subtract. $14 - 4\frac{5}{9}$

14. Write $\frac{7}{8}$ as a decimal.

15. Write 6.45 as a simplified mixed number.

16. Estimate: 79.6 x 8.923

17. Estimate: 53.8 ÷ 11.4

18. Write: $4 + \frac{9}{100} + \frac{7}{1000}$ as a decimal.

19. Divide. 1.632 ÷ 1000

20. Multiply. 3,000,000 X 0.00009

21. Subtract. $23\frac{17}{1000}$ - 6.0207

22. Add: 16.5 + 5.99 + 7.027

23. Subtract: 22.2 – 7.735

24. Find: a) $(0.6)^2$; b) $(1.5)^2$

25. Estimate: a) $\sqrt{62}$; b) $\sqrt{420}$

26. Subtract: 490 cm – 2.3 m. Give answer in meters. [1 m = 100 cm]

27. Write 0.08 as a simplified fraction.

28. 6.7 – 4.06 + 3

29. Solve for a: $\frac{6}{25} = \frac{a}{45}$

30. A number times 0.1 is the same as a number divided by what?

31. Solve for b: $\frac{56}{64} = \frac{4.2}{b}$

32. A biology class has 34 females and 28 males. What is the ratio, in lowest terms, of males to total students?

33. On a map, 0.25 in = 3 miles. How many inches on the map represent 27 miles?

34. Write $2\frac{3}{10}$ as a percent.

35. Write 6.4% as a decimal number.

36. Write 6.4% as a simplified fraction.

37. Write $70\frac{5}{6}$% as a fraction.

38. What is 50% of 27?

39. Twenty-nine is 5.8% of what number?

40. $62\frac{1}{2}$ % of what number is 40?

41. What percent of 50 is 2?

42. 4 is what percent of 25?

43. If the sales tax rate is 6%, find the tax paid for a book that costs $20?

44. At State College, 25% of the students are freshmen. If there are 4,000 students at State, how many are freshmen?

45. In a speech class, there are 28 freshmen. If this is 80% of the class, how many students are in the class?

46. The student enrollment at State College increased from 20,000 to 35,000 over an 8 year period. What was the percent increase?

47. An item is on sale for $24. The sale price represents a 20% discount off the original price. What was the original price?

48. The price of an item dropped from $60 to $36. What was the percent decrease?

49. The sale price is $42.50. Find the regular price if the sale price was 15% off of the regular price.

50. If 20% of a number is 40, then the number is what percent of 40?

ANSWERS:

1) 204 R 5	2) 26,000	3) 16	4) $14\frac{11}{12}$	5) 30 lbs
6) $\frac{1}{2}$	7) $4\frac{2}{7}yd^2$	8) $2\frac{4}{7}$	9) 28	10) a) $1\frac{5}{12}$ b) $30\frac{5}{18}$
11) $114\frac{3}{14}$	12) $12\frac{3}{4}$	13) $9\frac{4}{9}$	14) 0.875	15) $6\frac{9}{20}$
16) 720	17) 5	18) 4.097	19) 0.001632	20) 270
21) 16.9963	22) 29.517	23) 14.465	24) a) 0.36; b) 2.25	25) a) 7.9; b) 20.5
26) 2.6 m	27) $\frac{2}{25}$	28) 5.64	29) 10.8	30) 10
31) 4.8	32) $\frac{14}{31}$	33) 2.25 in	34) 230%	35) 0.064
36) $\frac{8}{125}$	37) $\frac{17}{24}$	38) 13.5	39) 500	40) 64
41) 4%	42) 16%	43) $1.20	44) 1000	45) 35
46) 75%	47) $30	48) 40%	49) $50	50) 500