

Review for incoming 6th graders

Name _____

For additional review go to www.phschool.com/math, PH Mathematics 2008 (Middle School) Course 1; practice tests in chapters 1 – 5, and 8.

Round each number to the indicated place value:

1.) 63,942,827 to hundred thousands place _____

2.) 67.782 to tenths place _____

Add using mental math. Name the property you use to make the addition easier.

3.) $15 + 78 + 85$ _____

4.) $(29 + 75) + 25$ _____

Find each product. Use patterns and properties to compute mentally.

5.) 700×900 _____

6.) $250 \times 19 \times 4$ _____

Fill in the blank with the proper power of ten (10, 100, 1000, etc.)

7.) $0.08 = 800 \div$ _____

8.) $500 = 0.5 \times$ _____

Multiply using the distributive property. Show your steps.

9.) 89×7

Add or subtract each of the following (you do not need to use mental math).

10. $5200 - 937.8$

11.) $34.2 + 17.85 + 0.479$

Find each product. Use the standard form to multiply and show your work. Estimate to check that your answer is reasonable.

12.)
$$\begin{array}{r} 295 \\ \times 426 \\ \hline \end{array}$$

13.)
$$\begin{array}{r} 486 \\ \times 702 \\ \hline \end{array}$$

14.)
$$\begin{array}{r} 0.097 \\ \times 0.54 \\ \hline \end{array}$$

Write each word phrase as an algebraic expression.

15.) c increased by 7

16.) the quotient of q and 9

17.) 7 less than d

18.) the product of 7 and f

Evaluate each expression for $x = 2.7$ and 0.04 .

19.) $0.8x$

20.) $5.2 - x$

21.) A bookstore is reorganizing its books. There are s identical shelves in the store. Each shelf holds 50 books. Write an expression that shows the total number of books that can be held on all the shelves.

Solve each equation. Be sure to show all your steps following the form shown in class.

22.) $k - 29 = 50$

23.) $\frac{t}{5} = 25$

24.) $m + 87 = 402$

25.) $7r = 490$

Find each quotient using mental math.

26.) $7000 \div 100$ _____

28.) $6400 \div 800$ _____

29.) $25.085 \div 100$ _____

30.) $8.85 \div 1000$ _____

Estimate each quotient (remember rounding and compatible numbers):

31.) $\$628.67 \div 7$ _____ 32.) $417,372 \div 68$ _____

Find each quotient. Round answers to nearest hundredth if necessary. You may use a separate piece of graph paper if you choose.

33.) $728 \div 6$

34.) $\$63.42 \div 7$

35.) $68 \overline{)1632}$

36.) $27 \overline{)10,989}$

37.) $38 \overline{)2.35}$

38.) One jeans day students turned in 139 quarters that had to be put into paper rolls. Each roll holds 20 quarters. How many rolls were be filled? How many quarters were left over?

39.) A sixth grade humanities classroom has 236 books that need to be shelved. If each shelf holds 25 books, how many shelves will be needed? What does the remainder stand for?

Tell whether each of the following is prime or composite:

40.) 39 _____ 41.) 87 _____

List all the factors of the following:

42.) 72 _____

Give the prime factorization of the following (make a factor tree):

43.) 84

44.) Find the greatest common factor (GCF) of 36 and 18.

45.) Find the least common multiple (LCM) of 18 and 24.

Write as an improper fraction:

46.) $6\frac{5}{9}$

Write as a mixed number:

47.) $\frac{38}{7}$

Find the missing number to make the fractions equivalent.

48.) $\frac{7}{15} = \frac{\quad}{45}$

Order the numbers from least to greatest.

49.) $\frac{5}{8}, \frac{11}{20}, \frac{7}{12}, \frac{9}{16}$

Write as a fraction in simplest form.

50.) 0.025

Write as a decimal.

51.) $3\frac{7}{50}$

Add or subtract. Be sure to leave answers in simplest form – change improper fractions to mixed numbers and reduce fractions to lowest terms.

52.) $7\frac{7}{10} + 6\frac{9}{10} =$

53.) $\frac{7}{8} - \frac{1}{24} =$

54.) $8\frac{7}{9} + 19\frac{5}{12} =$

55.) $20 - 6\frac{3}{18} =$