

6th Grade Assignment – Week #11

Individual Work:

- *Flashcards!* Are you keeping up with the flashcard? The facts you should learned through flashcards are found on Sheet #2, Sheet #6, and Sheet #9. Learning these facts will help your future math studies. It only takes a couple of minutes per day.
- See how much you can do on Sheet #11 in the workbook. Be sure to save #21-31 and #50-52 for your group work.

Group Assignment:

For Tuesday

1. **Discovery! Dividing by 9's and 0's**

Do Sheet #11, problems #21-31.

Now answer these questions:

What do the number of 9's in the denominator tell you about the answer?

What do the number of 0's in the denominator tell you about the answer?

2. **Puzzle!**

Janice has three children. The product of their ages is 360, and the sum of their ages is 22.

Find the ages of the 3 children. (There are two possible answers.)

For Thursday

3. **Puzzle!**

Imagine that you are selling apples. You begin your travels carrying 3 bags, each having 30 apples. Every apple must be in a bag, and no bag can hold more than 30 apples. When you pass through each of 30 villages, you must give 1 apple for each bag you are carrying. What is the greatest number of apples you can be left with after passing through all 30 villages?

4. **Measurement word problems**

Do Sheet #11, problems #50-52

6th Grade Math – Sheet #11

Do it in your head.

1) $28 \cdot 11$

2) 13^2

3) $(50)^3$

4) 1^{12}

5) $\sqrt{3600}$

6) $13 \cdot 3$

7) $\frac{\frac{3}{4}}{\frac{5}{6}}$

8) $860 \div 4$

9) $25 \cdot 4$

10) $\sqrt{0.000025}$

11) $65.7 \div 1000$

12) $5.837 \cdot 100$

13) 25^2

14) $45 \div 0.05$

15) $15 \cdot 5$

16) *Cast out nines to check your answer.*

$$\begin{array}{r} 7.92 \\ \times 57.8 \\ \hline \end{array}$$

Convert to decimals.

17) Each problem either has a trick or should be memorized.

a) $\frac{2}{5}$

j) $\frac{7}{9}$

b) $\frac{3}{4}$

k) $\frac{1}{10}$

c) $\frac{9}{10}$

l) $\frac{1}{11}$

d) $\frac{1}{3}$

m) $\frac{1}{9}$

e) $\frac{7}{99}$

n) $\frac{8}{9}$

f) $\frac{4}{9}$

o) $\frac{91}{100}$

g) $\frac{4}{11}$

p) $\frac{75}{999}$

h) $\frac{7}{20}$

q) $\frac{4}{999}$

i) $\frac{1}{6}$

r) $\frac{17}{20}$

18) Convert to fractions.

a) 0.5

f) 0.3

b) 0.6

g) 0.125

c) 0.7

h) 0.83

d) 0.17

i) 0.7

e) 0.75

j) 0.23

Divisibility.

State whether each of the following numbers is evenly divisible by 2, 3, 4, 5, 9, or 10.

19) 8,041,736

20) 7,485,030

Discover the trick!

Convert each fraction to a decimal. Divide only if necessary. Try to discover the trick for yourself.

21) $\frac{83}{99}$

22) $\frac{83}{990}$

23) $\frac{83}{9900}$

24) $\frac{83}{990000}$

25) $\frac{743}{999}$

26) $\frac{743}{9990}$

27) $\frac{743}{9990000}$

28) $\frac{4}{999}$

29) $\frac{4}{9990}$

30) $\frac{7}{900}$

31) $\frac{82}{9999000}$

Fractions.

32) $39\frac{2}{7} + 33\frac{3}{4}$

33) $(2\frac{1}{2})^4$

34) What is $\frac{1}{3}$ of 360?35) What is $\frac{3}{5}$ of 45?36) What is $\frac{5}{9}$ of 45?37) What is $\frac{2}{3}$ of 45?38) What is $\frac{3}{7}$ of 45?**Decimals.**

39) $379.4 - 6.932$

40) $(0.0079)^2$

41) $(1.1)^4$

Long Division.

What is the mistake in the problem shown below?

$$\begin{array}{r}
 42) \quad \quad \quad 161 \\
 \underline{47} \overline{)7990} \\
 \quad \quad \quad -47 \\
 \quad \quad \quad \underline{329} \\
 \quad \quad \quad \quad \underline{-282} \\
 \quad \quad \quad \quad \quad 47 \\
 \quad \quad \quad \quad \quad \underline{-47} \\
 \quad \quad \quad \quad \quad \quad 0
 \end{array}$$

Round your answers to three significant digits.

43) $2.52 \div 8200$

44) $1300 \div 6.78$

Measurement.

45) 64 inches is how many feet?

46) 116 ounces is how many pounds?

47) $4\frac{1}{2}$ cups is how many fluid ounces?

48) 3 gallons is how many pints?

49) How many inches are in one mile?

50) There are two marks made on a board, one at $17\frac{13}{16}$ inches from the end of the board, and the other at $23\frac{5}{16}$ inches from the same end. How far apart are the marks?51) A string, $15\frac{1}{2}$ -feet long, has been cut into 24 equally long pieces. How long (in inches) is each piece?52) One drill bit has a diameter of $\frac{3}{8}$ " and another is $\frac{11}{32}$ ". Which one is bigger, and by how much is it bigger?