

6th Grade Assignment – Week #10

Individual Work: See how much you can do on Sheet #10 in the workbook, but save #21 and #35-40 for your group work.

Group Assignment: (for either Tuesday and/or Thursday)

- **Discover the new math trick**

Do the problems on Sheet #10, problem #21, and try to discover the new trick.

- **Discover the law**

Do each of the below problems, and discover the law shown by these problems

Convert to a decimal:

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

2. $\frac{3}{40}$

3. $\frac{3}{400}$

4. $\frac{3}{5}$

5. $\frac{3}{50}$

6. $\frac{3}{5000}$

7. $\frac{9}{25}$

8. $\frac{9}{250}$

9. $\frac{9}{250000}$

Convert to a fraction:

10. 0.4

11. 0.004

12. 0.3

13. 0.03

14. 0.35

15. 0.035

16. 0.125

17. 0.000125

- **Measurement Practice**

Help each other out with Sheet #10, Problems #35-40.

- **Puzzle**

Fill in the four boxes so that the four equations are true.

$$\begin{array}{r} \square + \square = 13 \\ + \quad + \\ \square - \square = 6 \\ \parallel \quad \parallel \\ 14 \quad 10 \end{array}$$

6th Grade Math – Sheet #10

Do it in your head.

- 1) $18 \cdot 2$
- 2) $914 - 888$
- 3) $16 \cdot 3$
- 4) $(1.2)^2$
- 5) $\frac{5}{18} \div \frac{5}{9}$
- 6) $\frac{\frac{5}{18}}{\frac{5}{9}}$
- 7) $\sqrt{90000}$
- 8) $16 \cdot 4$
- 9) 18^2
- 10) $\frac{11}{12} \cdot \frac{36}{11}$
- 11) $3.15 \cdot 4$
- 12) $14 \cdot 2$
- 13) $\sqrt{1.21}$
- 14) $16 \cdot 2$
- 15) $72000 \div 60$
- 16) $109 \cdot 105$
- 17) $\frac{9}{10} - \frac{1}{3}$
- 18) $14 \cdot 3$
- 19) 16^2

Convert to decimals.

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

- a) $\frac{2}{9}$
 - b) $\frac{1}{20}$
 - c) $\frac{9}{20}$
 - d) $\frac{2}{3}$
 - e) $\frac{3}{5}$
 - f) $\frac{7}{10}$
 - g) $\frac{59}{100}$
 - h) $\frac{1}{8}$
 - i) $\frac{5}{11}$
 - j) $\frac{5}{9}$
 - k) $\frac{68}{99}$
 - l) $\frac{713}{999}$
 - m) $\frac{9}{11}$
 - n) $\frac{5}{6}$
 - o) $\frac{5}{8}$
 - p) $\frac{13}{20}$
- 21) Discover the trick.
- a) $7 \cdot 99$
 - b) $4 \cdot 999$
 - c) $5 \cdot 9999$
 - d) $3 \cdot 99999$

Estimate.

Round the numbers in the problem to one or two significant digits, then estimate the answer.

- 22) $685,036 + 725,672$
- 23) $2276 \cdot 807$
- 24) $81763 - 69627$
- 25) $48753 \div 716$

Unit Cost.

26) Five light bulbs cost \$3.40. How much do eight light bulbs cost?

27) Five light bulbs cost \$2.45. How much do 20 light bulbs cost?

Fractions.

28) $73\frac{3}{11} - 68\frac{1}{2}$

29) $\frac{5}{9} + \frac{7}{36}$

30) $\frac{5\frac{5}{8}}{6}$

31) $3 \div 4\frac{3}{8}$

32) $4\frac{3}{8} \cdot 5$

Divisibility.

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

33) 81,945

34) 9,472,152

Measurement.

35) 5 feet is how many inches?

36) 16 pounds is how many ounces?

37) 96 fl. oz. is how many cups?

38) 11 cups is how many pints?

39) $3\frac{1}{2}$ tons is how many pounds?

40) 1.7 miles is how many feet?

41) *Short Division.*

Leave your answer as a mixed number.

$$94034 \div 6$$

42) Convert the following improper fraction to *both* a mixed number and an exact decimal.

$$\frac{697}{24}$$

43) *New Flashcards!*

Look at all the *Powers* problems given at the end of the previous worksheet. Make a new flashcard for each one. (Those marked with a star are optional.)