6th Grade Assignment – Week #15

Individual Work:

- See how much you can do on Sheet #15 in the workbook. Be sure to save #34-37 for group work.

Group Assignments:

For Tuesday:

- Work together on problems #34-37 on Sheet #15.
- If there is extra time, then begin Thursday's group assignment.

For Thursday:

- *Factor Puzzles!*
  Here is a list of numbers: 23, 41, 51, 83, 87, 95, 117, 119, 127, 583.

  1) Which of the above numbers is divisible by 3?
  2) One of the above numbers is divisible by 7. Which is it?
  3) One of the above numbers is divisible by 11. Which is it?
  4) Which of the numbers in the list are prime? (Hint: there are four.)
  5) (If you have time…) For each of the above numbers, write down all of the factors. To save time, each member of the group should work on different numbers. Which of the numbers in the list has the most factors?

- *Metric.* Fill in the blank with the correct number.

  6) 88 m = _____ cm
  7) 88 m = _____ km
  8) 640 cm = _____ m
  9) 640 cm = _____ mm
  10) 8.6 ℓ = _____ mℓ
  11) 8.6 mℓ = _____ ℓ
  12) 7 g = _____ mg
  13) 47 mg = _____ g
  14) 3 kg = _____ mg

6th Grade Math – Sheet #15

Memorized facts.

1) $13 \cdot 2$

2) $15 \cdot 3$

3) $16 \cdot 4$

4) 18^2

5) Convert $\frac{1}{4}$

6) Convert $\frac{3}{5}$

7) Convert $0.\overline{7}$

8) Convert 0.125

9) 4^3

10) 5^4

11) 2^5

Do it in your head.

12) $1100 \cdot 70$

13) $0.0007 \cdot 100$

14) $91 \cdot 11$

15) $600 \div 4$

16) $137 \div 999$

17) $210 \div 240$

18) $800 \div 5$

19) $120 \div 5$

20) $0.7 \div 5$

21) 600^2

22) $\left(\frac{2}{3}\right)^3$

23) $\sqrt{0.09}$

Fractions.

24) $\frac{7}{8} + \frac{7}{12}$

25) $\frac{27}{35} + \frac{19}{27}$

26) $\frac{27}{35} \cdot \frac{19}{27}$

27) $4\frac{3}{8} \div 1\frac{5}{16}$

28) $\dfrac{4\frac{3}{8}}{1\frac{5}{16}}$

29) $\dfrac{1\frac{5}{16}}{4\frac{3}{8}}$

Division.

30) Leave your answer as an exact decimal.
$856 \div 2.7$

Formulas.

31) On the previous worksheet, review the pay problems about John who works in a bike shop. Use the same formula to do the following problems:

a) How much pay does John earn if he works for 40 hours and sells 11 bikes?

b) John works 22 hours per week. How much pay does he earn if he works for 4 weeks and sells 7 bikes each week?

Measurement.

32) State what each abbreviation stands for and about how big it is.

a) m

b) km

c) cm

d) mm

e) ℓ

f) mℓ

g) g

h) kg

i) mg

33) Measure the line below in inches, centimeters and millimeters.

34) As with the previous worksheet, for each of the below problems write a sign (<, >, =) between the two measurements that indicates which one is bigger, or if they are equal.

a) 1ℓ 1000mℓ

b) 1kg 2 lb.

c) 7kg 7000g

d) 1m 100cm

e) 1km ½mi

f) 1mi 2km

g) 1gal 4ℓ

35) What is the advantage of the metric system?

Unit Cost.

36) 3 quarts of maple syrup cost $19.47. How much do 3 gallons of maple syrup cost?

37) Which is a better buy: 2½ pounds of cheese for 14 dollars, or the same cheese at a cost of 33¢ per ounce?

Factors.

38) List all of the factors.

a) 100

b) 144

39) Write down the prime numbers up to 100.

Converting repeating decimals to fractions.

40) Review the example and the problems given at the end of the previous worksheet, and then convert the following repeating decimals into fractions.

a) $0.05\overline{2}$

b) $0.84\overline{459}$