

## 6<sup>th</sup> Grade Assignment – Week #25

Individual Work: As always, do what you can!

- Do as much as you can with Sheet #21 in the workbook.  
Save problems #34-38 for group work.

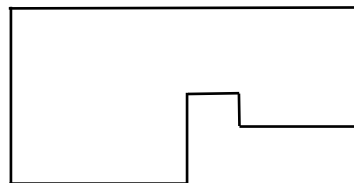
Group Assignments: Work on the below problems on Tuesday or Thursday, as desired.

- 1) *Percents practice.* Work together and help each other doing problems #34-38 on Sheet #21.
- 2) *Areas of Shapes.* With each of the below shapes, every angle is a right angle. The drawing is not drawn accurately to scale, but the length of each edge must be a whole number in centimeters. Find the length of each edge that makes the area work. There are multiple solutions, so try to find as many solutions as you can.

a) Area = 60 sq. cm.



b) Area = 98 sq. cm.



- 3) Write the prime factorization for each of these numbers:
  - a) 9
  - b) 99
  - c) 999
  - d) 9999
  - e) 99999 (Challenge!)
- 4) *Puzzle!* Lexie has two-thirds as much money as Fiona, and Sam has \$8 less than Fiona. How much do the three of them have combined if Sam has \$10?
- 5) *Puzzle!* Two-thirds of the students in Mr. Smith's class are girls. If there are 12 boys in the class, how many total students are there in the class?

# 6<sup>th</sup> Grade Math – Sheet #21

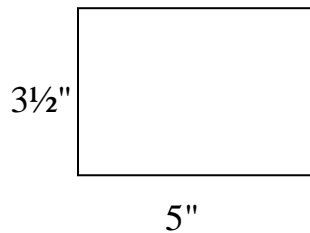
## Do it in your head.

- 1)  $120 \cdot 90$
- 2)  $7649 \div 100$
- 3)  $0.87 \cdot 11$
- 4)  $25 \cdot 3$
- 5)  $6.4 \div 4$
- 6)  $220 \div 330$
- 7)  $14^2$
- 8)  $13 \cdot 3$
- 9)  $25 \cdot 2$
- 10)  $2^4$
- 11)  $3^3$
- 12)  $4^5$
- 13)  $\sqrt{0.0049}$
- 14)  $9000^2$
- 15) Convert to a percent.
  - a)  $\frac{1}{5}$
  - b) 0.61
  - c)  $\frac{5}{8}$
- 16) Convert to a fraction.
  - a) 0.3
  - b) 40%
  - c)  $16\frac{2}{3}\%$
- 17) Convert to a decimal.
  - a)  $\frac{4}{99}$
  - b) 87%
  - c) 6%

## Area and Perimeter.

18) Calculate the area and perimeter.

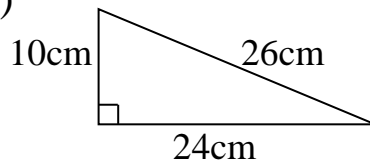
a) A rectangle:



Perimeter =

Area =

b)



Perimeter =

Area =

## Statistics.

19) Find the *Mean*, *Median*, and *Mode* of these scores:

7, 3, 23, 9, 5, 16, 5, 3, 16,  
3, 9, 7, 9, 18, 8, 11, 4.

## Fractions, Decimals & Percents.

20) What is  $\frac{3}{8}$  of  $4\frac{5}{6}$ ?

21)  $(0.2)^{10}$

22) Convert to a fraction.

a) 0.72

b) 0.015

c) 0.468

d) 74%

e) 81.25%

23) Convert to a percent.

a) 0.96

b) 0.05

c) 0.1

d) 0.873

e)  $\frac{7}{50}$

f)  $\frac{43}{60}$

What is...

24) 60% of 65?

25) 73% of 680?

26)  $33\frac{1}{3}\%$  of 12000?

27)  $12\frac{1}{2}\%$  of 240?

28)  $16\frac{2}{3}\%$  of 72?

29) 7 is what percent of 35?

30) 18 is what percent of 75?

31) 450 is what percent of 540?

32) 43 is what percent of 60?

33) The previous problem is the same as which other problem on this worksheet?

34) What is 2400 decreased by 21%?

35) What is 40 increased by  $62\frac{1}{2}\%$ ?

### **Business Math.**

36) A bicycle in a shop is marked at \$260. What do you pay if the tax rate is 7%?

37) Bill can make a chair at a cost of \$36, including parts and labor. What must his selling price be (rounded to the nearest dollar) if he wants to make a 30% profit?

38) A clothing store is having a 35%-off sale. What is the new discounted price of a jacket that was originally marked at \$120?