

7th Grade Assignment – Week #9

Individual Work

- As much as you can, do the following problems. In preparation for the test, you should focus on the problems which you need to practice the most.
 - Measurement Sheet #5, problems #1, 2, 3, 6-13
 - Measurement Sheet #6, problems #1, 2, 3, 7-17

Group Assignment:

- *For Tuesday.* Work together on Measurement Sheet #5, problems #5-18.
- *For Thursday.*
 - Work together on Measurement Sheet #6, problems #4-6.
 - *Puzzle!* One number is one less than twice another number. Twice the sum of the numbers is 49. Find the two numbers.
 - *Puzzle!* Twice Bill's weight is 12 kilograms less than Frank's weight, but 3 times Bill's weight is 3 kilograms more than Frank's weight. Find Frank's weight.

Measurement – Sheet #5

1) **Add or subtract.**
Give answer in the largest unit.

a) $45\ell + 270\text{ml} =$

b) $4300\text{g} + 87\text{kg} =$

c) $5\text{yd} - 30\text{in} =$

d) $3\text{pt} + 2\text{qt} - 36\text{fl.oz} =$

e) $0.4\text{m} + 763\text{cm} =$

2) **Complete.**

a) $\frac{3}{4}\text{mi} = \underline{\hspace{2cm}}\text{ft}$

b) $\frac{3}{8}\ell = \underline{\hspace{2cm}}\text{ml}$

c) $1.5\text{cm} = \underline{\hspace{2cm}}\text{mm}$

d) $9706\text{cm} = \underline{\hspace{2cm}}\text{km}$

e) $1\frac{1}{2}\text{qt} = \underline{\hspace{2cm}}\text{fl.oz}$

f) $84\text{mm} = \underline{\hspace{2cm}}\text{m}$

g) $1\text{week} = \underline{\hspace{2cm}}\text{hr}$

h) $73.1\text{kg} = \underline{\hspace{2cm}}\text{g}$

i) $3\text{fl.oz.} = \underline{\hspace{2cm}}\text{tsp}$

j) $48\text{tsp} = \underline{\hspace{2cm}}\text{fl.oz.}$

k) $6700\text{mm} = \underline{\hspace{2cm}}\text{m}$

l) $8.1\text{kg} = \underline{\hspace{2cm}}\text{mg}$

m) $1\text{hr} = \underline{\hspace{2cm}}\text{s}$

n) $144\text{pt} = \underline{\hspace{2cm}}\text{gal}$

3) A crate loaded with 36 blocks of wood weighs 1.43 metric tons. Each block weighs 37.5kg. What does the crate weigh when empty? (Give your answer in kg.)

4) 2ℓ of a certain paint will cover 25sq.m. How many liters of paint are needed to cover 300sq.m?

- 5) A certain relay race is made up of 8 segments. Each segment is 1500m long.
- a) How long is the whole race (in km)?
- b) What fraction of the race has passed after 3000m?
- c) How many complete segments have been finished after 7600m?
- d) Jane drinks an average of 325ml during each segment. How many liters does she drink during the whole race?
- e) If she started with 3.0ℓ, then how much is left at the end of the race (in ml)?

Mental Math

- 6) $65^2 =$
- 7) $35^2 =$
- 8) $120 \cdot 25 =$
- 9) $25 \cdot 28 =$
- 10) $51 \cdot 490 =$
- 11) $216 \div 5 =$
- 12) $103 \cdot 105 =$
- 13) $2800 \cdot 25 =$

Review Section

- 14) Short Division. Leave your answer as a mixed number.

$$432503 \div 6$$

- 15) Convert to a fraction.

- a) 0.089
- b) 0.375
- c) 0.0025

- 16) Reduce.

$$\frac{3888}{8208}$$

- 17) $\frac{3}{11} + \frac{5}{6}$

- 18) Multiply only the first two out, and then look for patterns for the rest.

a) $12345679 \cdot 18 =$

b) $12345679 \cdot 45 =$

c) $12345679 \cdot 72 =$

d) $12345679 \cdot 9 =$

e) $12345679 \cdot 81 =$

f) $12345679 \cdot 54 =$

g) $12345679 \cdot 27 =$

h) $12345679 \cdot 36 =$

i) $12345679 \cdot 63 =$

j) Challenge!

$$12345679 \cdot 99999999 =$$

Measurement – Sheet #6

1) State what each prefix means.

a) Kilo-

b) Milli-

c) Centi-

2) A truck is carrying 1.8 metric tons of metal bars. Each bar has a weight of 7500g and a length of 350cm. If they were all laid end-to-end, then how long would the line of bars be? (Give your answer both in meters and in km.)

3) **Add or subtract.**

Give answer in the largest unit.

a) $25\text{cm} + 18\text{m} =$

b) $7.3\ell - 28\text{m}\ell =$

c) $4200\text{mm} + 15\text{m} =$

d) $17\text{min} - 510\text{s} =$

4) A pitcher that can hold 1.6ℓ is $\frac{5}{8}$ full. How many milliliters are in the pitcher?

5) How many 15g servings are in a 0.42kg block of cheese?

6) How many 15mm-thick slices can a 25.5cm-long loaf of bread be cut into?

7) Circle that which is most reasonable.

a) 2.2 m

length of an arm

length of a bed

length of a football field

b) 1200 kg

weight of a bicycle

weight of a car

weight of a train

c) 384400 km

distance to town

distance to Mexico

distance to the moon

d) 3 mℓ

volume of a bucket

volume of a mug

volume of a thimble

e) 90 kg

weight of a heavy dog

weight of a heavy horse

weight of a heavy whale

Mental Math

8) $35^2 =$

9) $95^2 =$

10) $850^2 =$

11) $250 \cdot 4800 =$

12) $160 \div 240 =$

13) $0.014 \div 4 =$

14) $54 \cdot 11 =$

15) $112 \cdot 108 =$

16) **Complete.**

- a) 12 m = _____cm
- b) 544 fl.oz = _____pt
- c) 0.06 mL = _____ℓ
- d) 0.097 kg = _____mg
- e) $\frac{3}{8}$ gal = _____c
- f) 0.07 mm = _____km
- g) 9.34 kg = _____mg
- h) 16000 oz = _____ton
- i) 3.8 mg = _____kg
- j) $5\frac{1}{2}$ gal = _____qt
- k) 1 c = _____tsp
- l) 648 in = _____yd

Review Section

17) Roots.

- a) $\sqrt{1000000}$
- b) $\sqrt[3]{1000000}$
- c) $\sqrt[6]{1000000}$
- d) $\sqrt[3]{27000000}$
- e) $\sqrt[5]{3200000}$

18) Convert to a decimal.

- a) $\frac{1}{8}$
- b) $\frac{725}{999}$
- c) $\frac{7}{50}$
- d) $\frac{71}{88}$

19) Convert to a mixed number.

- a) $\frac{39}{7}$
- b) $\frac{6841}{23}$

20) Convert to an improper fraction.

- a) $8\frac{7}{12}$
- b) $1010\frac{1}{11}$

c) $3030\frac{3}{11}$

d) $707070\frac{7}{11}$

21) Give your answer both as a decimal and as a fraction.

- a) $0.8 - \frac{3}{4}$
- b) $\frac{7}{20} + 0.35$
- c) What is $\frac{3}{5}$ of 0.17?

22) $(0.004)^3$

23) $6 \div 8\frac{1}{4}$

24) *Challenge!*

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