Solutions to Tutorial Set 12 - Some Simple Grammar

Tell what is wrong with each of these sentences and why:

1. To who will the prize be given?

   Answer: Replace who with whom.

   Who and *whoever* are for subjects.

   Who and *whoever* also follow and complete the meaning of linking verbs. In grammarspeak, *who* and *whoever* serve as linking verb complements.

   Whom and *whomever* are for objects — all kinds of objects (direct, indirect, of prepositions, of infinitives, and so on).

2. What is the relationship between you and he?

   Answer: Replace he with him.

   He is used as a pronoun (subject)t which is the nominative case. Him is used as an object (the objective case).

3. There were a lot of peoples from our Church at the program.

   Answer: Use people. Omit the s.

   In more general, commonly used, contexts, the plural form will also be people. However, in more specific contexts, the plural form can also be peoples e.g. in reference to various types of peoples or a collection of peoples.

4. We went fishing and caught 20 fishs.

   Answer: Change fishs to fish.

5. The letter was sent to you and he.

   Answer: Change he to him. The objective case is needed.

6. All of the football players has good health.

   Answer: Change has to have. The plural form is needed.

7. All twenty of them sings in the choir.

   Answer: Change sings to sing. The singular form is needed.

8. There will not be no more cold weather this year.

   Answer: Change no to any. A double negative is being used. A **double negative** is a grammatical construction occurring when two forms of negation are used in the same sentence.

9. I went to see a old friend yesterday.

   Answer: Change a to an. The word an is usually used before words that begin with a vowel. However, this is not true all the time; several words starting with u (such as unusual) are exceptions).

10. Peter and Paul was two of the early Church leaders.

    Answer: Change was to were. The plural form is needed.

Solutions to Tutorial Set 13 - Seventh Grade Math Practice Example-1

From LEAP 25

1. On Mondays, a café offers its customers a 25% discount on all coffee purchases. The café usually charges c dollars for a flavored coffee. The expression below can be used to determine the cost of a flavored coffee on Mondays.

   c – 0.25c

   Which expression could also be used to determine the cost of a flavored coffee on Mondays?

   A. 0.25c B. 0.75c C. 1.25c D. 1.75c

   Answer: B.
   c-0.25c = c(1 – 0.25) = .75c

2. Payton bought packages of black T-shirts and packages of white T-shirts. Each package of black T-shirts contains 3 shirts. Each package of white T-shirts contains 4 shirts. Payton bought *b* packages of black T-shirts and 5 packages of white T-shirts for a total of 38 T-shirts.

   Which equation could Payton solve to determine the number of packages of black T-shirts, *b*, he bought?

   A. $38 - 5(4) = b$ B. $3b + 4(5) = 38$ C. $38 - 3b = 5$ D. $3(4) + 5b = 38$

   Answer: B

   The number of black shirts = 3b. The number of white shirts = 4(5).

   The total is 3b + 4(5) = 38.

3. Lara charges $12 per hour for babysitting. If *f* represents Lara's total fee after babysitting for *h* hours, which equations can be used to model the situation?

   Select **all** the correct equations.

   A. $f = 12h$ B. $f = (1/12)h$ C. $h = 12f$ D. $h = (1/12)f$ E. $f = h + 12$ F. $h = (1/12)f$

   Answer: A and D. For A, f= 12h. Divide by 12 to get h = f/12

4. The table below shows the high temperature for each of six days in February. It also shows the difference between the high and the low temperature for each day.

Daily Temperatures

Day	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
high	8°F	3°F	–2°F	0°F	13°F	4°F
difference	9°F	8°F	5°F	3°F	11°F	9°F

Select **all** the days that the temperature reached below –3°F.

A. Monday B. Tuesday C. Wednesday D. Thursday E. Friday F. Saturday

Answer: Tuesday, Wednesday and Saturday

5. Paige had 18 dollars. She spent 6 of these dollars.

Select **all** the expressions that could be used to represent the number of dollars that Paige has now.

A. 18 + 6
B. 18 + 6
C. 18 – 6
D. (18) – 6
E. 18 + (6)
F. 18 – (6)

Answer: C, D and F

Solutions to Tutorial Set 14 – Solving Equations with One Unknown

I will give just one example. You can fine many more examples on YouTube with the about topic if you need more examples.

Example: Find x in the equation 2x + 5 = 29.

The key is that what is done to one side of the equation must be done to the other side of the equation. We will first move 5 to the right side of the equation. This is done by subtracting 5 from each side of the equation as follows:

2x + 5 – 5 = 29 – 5 to get

2x = 24.

Now divide each side of the equation by the coefficient of x to just leave x on the left had side of the equation to give

2x/2 = 24/2 or

x = 12 which is the answer.

Note that if we had an equation such as x/a = y, we cha multiply each side of the equation by a to get a(x/a) = ay or simple x = ay.

Note that this is the same still as dividing by the coefficient of x in that the coefficient of x is (1/a) in that (x/a)/(1/a) = (a/1)(x/a) = x.

We will later cover the top of dividing fractions but for now, we will keep it simple.

Solve the following problems for x:

1. 3x – 2 = 10

   3x = 10 + 2

   3x = 12

   x = 12/3

   x = 4

2. $8x + 6 = 30$

$8x = 30-6$

$x = 24$

$x = 24/8$

$x = 3$

3. $5x – 5 = 45$

$5x = 45+5$

$5x = 50$

$x = 50/5$

$x = 10$

4. $x/2 = 12$

$x = 2(12)$

$x = 24$

~~5. $x/2 + 4 + 10$~~

5. $x/2 = 4 + 10$

$x = 2(4 +10)$

$x = 2(14)$

$x = 28$

Solutions to Tutorial Set 15 – Some Simple US History

Instructions: Go to the Internet if needed.

1. Who was the first president of the United States?

   Answer: George Washington

2. Name the 13 original colonies.

Articles of Confederation ratification date

The Second Continental Congress approved the Articles of Confederation for ratification by the individual states on November 15, 1777. The Articles of Confederation came into force on March 1, 1781, after being ratified by all 13 states. On March 4, 1789, the general government under the Articles was replaced with the federal government under the present Constitution.[43]

	State	Date
1	Virginia	December 16, 1777
2	South Carolina	February 5, 1778
3	New York	February 6, 1778
4	Rhode Island	February 9, 1778
5	Connecticut	February 12, 1778
6	Georgia	February 26, 1778
7	New Hampshire	March 4, 1778
8	Pennsylvania	March 5, 1778
9	Massachusetts	March 10, 1778
10	North Carolina	April 5, 1778
11	New Jersey	November 19, 1778
12	Delaware	February 1, 1779
13	Maryland	February 2, 1781

3. Name the New England states.

   New England is a region composed of six states in the northeastern United States: Maine, Vermont, New Hampshire, Massachusetts, Rhode Island, and Connecticut

4. What does the word Pennsylvania mean? Hint: The last part of the name comes from Latin.

   Pennsylvania means "Penn's woods" or "Penn's land." Quaker William Penn was granted the tract of land by King Charles II of England in 1681 as repayment of debt owed to Penn's father (Admiral William Penn).

5. What does the word Philadelphia mean? Hint: The name comes from Greek or Latin.

   Answer: City of brotherly love.

   City in Pennsylvania, U.S., from Greek, taken by William Penn to mean "brotherly love," from philos "loving" (see -phile) + adelphos "brother"

   Greek adelphos "brother," literally

Solutions to Tutorial Set 16 – Concerning How Time is Reckoned (Do you know what time it is?)

1. What does AD mean when referring to time? (Hint: It is Latin)

   Answer: The term *anno Domini* is Medieval Latin and means "in the year of the Lord"

2. What does BC mean when referring to time?

   Answer: Before Christ

3. What do the letters CE mean when referring to time? Explain.

   Answer: "Common Era." This meaning for "CE" is a synonym for "**AD."**

   In the later 20th century, the use of CE and BCE was popularized in academic and scientific publications as a culturally neutral term. It is also used by some authors and publishers who wish to emphasize sensitivity to non-Christians by not explicitly referencing Jesus as "Christ" and *Dominus* ("Lord") through use of the abbreviation[c] "AD".

4. In what year was Jesus born? Explain.

   Answer: Christ was probably born in year 2 or 3 BC.

   From history, we believe that Herod died in the year 4 B.C. So we might conclude that Jesus must have been born about one or two years before the date of Herod's death, in order for the Magi to have had time for their travel and to describe to Herod how old the child born at the time of the star must now be. (Note that all these dates are speculative and have flexibility—including Herod's death date: did he die in January or December, and into which year were those 12 months placed?) Flexibility again. So maybe Christ was born in 4 or 5 *Before Christ*.

   But using some dates from the book of Luke, the consensus among scholars today (including most church fathers) seems to be an average of about this: Christ was probably born in year 2 or 3 Before Christ.

5. At what time was AD and BC adapted for reckoning time?

Answer: The year 525

A mathematically-minded monk and member of the Roman Curia, Dionysius Exiguus, invented the concept of A.D. As indicated above, this man's concern was to make accurate predictions going forward of when Easter should be celebrated annually. To him I'm sure, Christian time ought to dominate Romulus-and-Remus time, so he counted backward 525 years from the year he was making his calculation to "the incarnation of our Lord Jesus Christ"…or to *in the year of our Lord*, A.D 1. Scholars find it difficult to understand how Dionysius picked 525 years for his calculation.

There is no year zero in this scheme, so the year AD 1 immediately follows the year 1 BC. This dating system was devised in 525 by Dionysius Exiguus of Scythia Minor, but was not widely used until after 800.