**Day 1 Homework Math 105 -- KEY**

**Thinking Ahead About Percentages** – You should understand these questions fully before the next class. Check your answers with the key on your instructor’s website. You can get help with this work from the following sources:

* Yellow box on p. 3 of your textbook
* Visit your instructor during office hours
* Go to the Algebra Alcove – you do not have to go only during the 105 specific hours
* Use the following resources on the Internet:

**Meaning of Percent and Conversions**

* <http://www.mathgoodies.com/LESSONS/vol4/meaning_percent.html>

**Conversion**

* + <http://www.youtube.com/watch?v=RvtdlnYFNhc>

**Estimation**

* + <http://www.hellam.net/maths2000/percent1.html>

**Convert #1-4 to decimals. Convert #5-8 to percents.**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. 26% 2. .26 | 2. 1.87%  .0187 | 3. 321%  3.21 | 4. .0097%  .000097 |
| 5. .74  74% | 6. .0023  .23% | 7. 12  1200% | 8. 3  300% |

**Select the percentage from the list below that best fits each statement.**

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| .1% | 1% | 12% | 44% | 62% | 70% | 81% | 90% | 198% | 220% |

1. A value has almost doubled. \_\_\_198%\_\_\_\_
2. A little less than half. \_\_\_44%\_\_\_\_
3. Almost the full amount. \_\_90%\_\_\_\_
4. About one out of every ten. \_12%\_\_\_\_\_
5. About two-thirds. \_\_\_70%\_\_\_
6. About 4 out of 5. \_\_81%\_\_\_
7. One in a hundred. \_\_\_1%\_\_\_

**For each situation, select the best estimate from the table below. Answers may be used more than once.**

|  |  |  |  |
| --- | --- | --- | --- |
| < 1% | Between 1% and 50% | Between 50% and 100% | >100% |

1. Three students as a percentage of the students in your math class.

Between 1% and 50%

1. Three students as a percentage of the students at Fort Lewis.

<1%

1. Three students as a percentage of the starting basketball team (5 players).

Between 50% and 100%

1. The percentage of wins of a team with a winning season.

Between 50% and 100%

1. The percentage of your salary after a raise compared to before the raise.

>100%

1. One day as a percentage of the week.

Between 1% and 50%

1. A normal child’s height at age 5 compared to age 3.

>100%

1. One gallon of gas as a percentage of all the gas used in Colorado in a year.

<1%