

Math 6 - Unit 1: Number System Fluency

Long Division Problem Solving

Name: _____

Class Period: 1 2 3 4 Date: _____

Use the following information to answer questions 1-5. Show all your work on a separate piece of paper.

Shawna will read 8 books during the summer. There are 2,325 total pages in her 8 books. Jake will read 7 books during the summer. There are 2,047 total pages in his 7 books. Shawna will read the same number of pages each day. Jake will also read the same number of pages each day.

- 1) There are 89 days of summer break. How many pages will Shawna read each day? How many pages will she have left?
- 2) How many pages will Jake read each day during the 89 days of summer break? How many pages will he have left?
- 3) Shawna reads 25 pages per hour. How many hours will she spend reading the 8 books?
- 4) Jake reads 23 pages per hour. How many hours will he spend reading the 7 books?
- 5) If each page has an average of 212 words, about how many words will Shawna read during the summer?

Answer questions 6-8. Show all your work on a separate piece of paper.

- 6) There are 543 sixth graders and chaperones going on a field trip to the aquarium. 30 students will fit on a bus. How many busses will they need to take to get all of the people to the aquarium? Will every bus be completely filled?
- 7) Jennifer plans to make 115 invitations. It takes $\frac{1}{2}$ a sheet of paper to make one invitation, so each piece of paper will make 2 invitations. How many pieces of paper will she need to buy in order to make all of her invitations? Will there be any leftover paper?
- 8) A bracelet requires 15 beads. Amari has 1245 beads. How many bracelets can she make? Will there be any leftover beads?

Use the following information to answer questions 9-11. Show all your work on a separate piece of paper.

A small manufacturing company produces picture frames sold at craft stores. The frames are sold in packages containing 4, 5 or 8 frames per package.

- 9)** During one hour at the factory, workers assembled 95 frames. If all the frames were placed in packages of 5 frames each, how many packages were produced? How many frames were left over?
- 10)** During one shift, the factory produced only packages containing 8 frames each. If the total number of frames was 730, how many full packages were assembled? How many frames were left over?
- 11)** The company received an order for 250 frames. The boss does not want any frames left over. How many frames should be in each package so there are no frames left over? How many packages will there be in total? *(Remember the frames can only be packaged in sets of 4, 5 or 8.)*

Math 6 - Unit 1: Number System Fluency

Long Division Word Problems

Answer Key

Name: _____

Class Period: 1 2 3 4 Date: _____

Use the following information to answer questions 1-5. Show all your work on a separate piece of paper.

Shawna will read 8 books during the summer. There are 2,325 total pages in her 8 books. Jake will read 7 books during the summer. There are 2,047 total pages in his 7 books. Shawna will read the same number of pages each day. Jake will also read the same number of pages each day.

- 1) There are 89 days of summer break. How many pages will Shawna read each day? How many pages will she have left? **26 pages per day with 11 pages left over.**
- 2) How many pages will Jake read each day during the 89 days of summer break? How many pages will he have left? **23 pages per day with no leftovers.**
- 3) Shawna reads 25 pages per hour. How many hours will she spend reading the 8 books? **93 hours**
- 4) Jake reads 23 pages per hour. How many hours will he spend reading the 7 books? **89 hours**
- 5) If each page has an average of 212 words, about how many words will Shawna read during the summer? **492,900 words (This one required you to multiply!)**
- 6) There are 543 sixth graders and chaperones going on a field trip to the aquarium. 30 students will fit on a bus. How many busses will they need to take to get all of the people to the aquarium? Will every bus be completely filled? **They need 19 busses. One bus will not be completely filled.**
- 7) Jennifer plans to make 115 invitations. It takes $\frac{1}{2}$ a sheet of paper to make one invitation, so each piece of paper will make 2 invitations. How many pieces of paper will she need to buy in order to make all of her invitations? Will there be any leftover paper? **57 invitations can be made. There will be a half of a piece of paper left over.**
- 8) A bracelet requires 15 beads. Amari has 1245 beads. How many bracelets can she make? Will there be any leftover beads? **Amari can make 83 bracelets and there will not be any beads left over.**

Use the following information to answer questions 7-9. Show all your work on a separate piece of paper.

A small manufacturing company produces picture frames sold at craft stores. The frames are sold in packages containing 4, 5 or 8 frames per package.

- 9) During one hour at the factory, workers assembled 95 frames. If all the frames were placed in packages of 5 frames each, how many packages were produced? How many frames were left over? **19 packages were produced with no frames left over.**
- 10) During one shift, the factory produced only packages containing 8 frames each. If the total number of frames was 730, how many full packages were assembled? How many frames were left over? **91 packages with 2 frames left over.**
- 11) The company received an order for 250 frames. The boss does not want any frames left over. How many frames should be in each package so there are no frames left over? How many packages will there be in total? *(Remember the frames can only be packaged in sets of 4, 5 or 8.)* **5 frames should be in each package. There will be 50 total packages.**