

Name: _____

Grade: _____

TumbleBook Library Math Problems

Show all your work. Use words, pictures, charts and/or drawings to show how you arrived at your answers.

1. a) The population of Canada is over 32 000 000.

Write this as a power of 10.

b) The World's population is approximately 6.6 billion.

Write this as a power of 10.

c) Compare Canada's population to the population of the entire world.

d) Why are both population counts approximations?

2. Janice wants to buy a new cell phone. Her current plan gives her the cell phone for no charge and unlimited talk and text for \$49.99 a month. The phone she is interested in buying costs \$59.98 and the new plan will charge her \$31.95 a month for unlimited talk and text.

How many months will it take for the new phone to cost less per month than her current phone?

3. The cost to professionally print a book can be expressed as $\$500 + 1.15p$ where \$500 is the initial set-up fee for printing and each additional page is \$1.15.

How much will it cost to professionally print a 432 page book?

4. Jake has read 26 books. Jake has read 1 fewer than 3 times the number his friend, Liam, has read.

How many books has Liam read?

5. Morgan is a good reader. She can read 2910 words in 15 minutes.

How many words does she read on average for each minute?

6. Most novels are rectangular prisms. The volume of one novel is 231 cm³.

What are the possible length, width, and depth measurements of the novel?

7. On Monday Ralph read $\frac{1}{8}$ of his novel. On Tuesday he read another $\frac{1}{6}$ of the novel. On Wednesday he read $\frac{1}{5}$ of the novel.

What is the exact fraction of the novel that Ralph has left to read?

What would be an estimation of the fraction of the novel that Ralph has left to read?

8. Write an equation and solve for the following:

a) a regular octagon is 104 units

b) Five less than two times a number is -1

c) $(2 + 5.3) + 5.2 \times 10^3$

9. Use the information below to chart the results from the TumbleBook survey. Be as accurate as possible in your representation.

TumbleBooks Read	Girls	Boys
Hannah Is My Name	8.5	3
Crazy For Canada	7	8.75
Don't Forget to Come Back!	6.25	6
Dog Days	10	4.9
Slam Dunk	4	10.45
Jesse's Star	5	8
Underdog	9.9	7