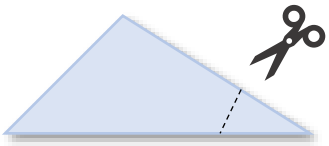
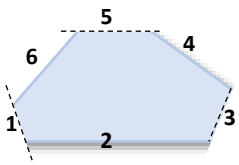
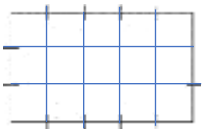
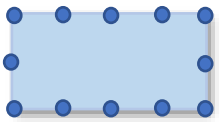
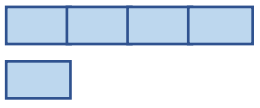
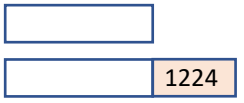
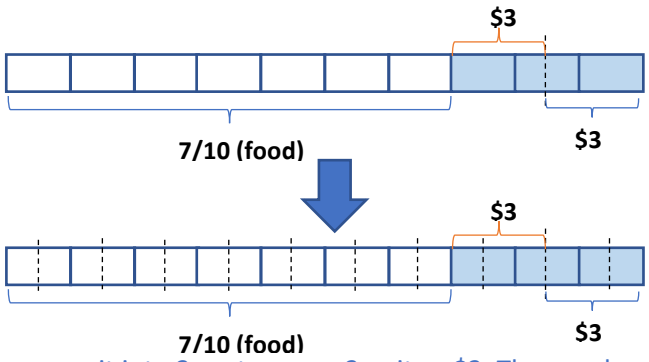
First Name: _____ **Last Name:** _____ **Grade:** _____

Teacher: _____ **Parent's email:** _____

Draw it out or act it out!

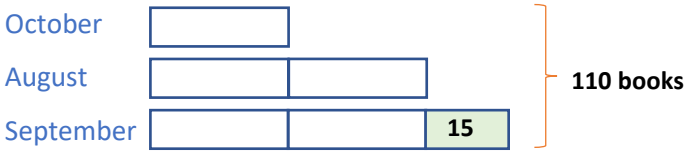
Kinder & First Grade: solve <u>at least</u> 3 problems.
Second & Third Grade: solve <u>at least</u> 7 problems.
Fourth Grade and above: solve <u>at least</u> 12 problems.

		Answer
1.	Sanjay wrote "MATH IS FUN" on a large poster board. He colored all the vowels red and the rest blue. How many letters are blue? MATH IS FUN There are **6** blue letters.	*6 [letters]*
2.	Anita had 2 more pencils than Daniel. Anita had 6 pencils. How many pencils did Anita and Daniel have altogether? Anita = 6 pencils Since Anita had 2 more pencils than Daniel, Daniel had 6 – 2 = 4 pencils. Both of them had 6 + 4 = **10 pencils.** 	*10 [pencils]*
3.	 In the art room, Mr. Gupta set up some chairs. Nine children came in to the art room. Each child sits on a chair. There are 3 empty chairs left. How many chairs did Mr. Gupta set up? 9 chairs + 3 chairs = **12 chairs**	*12 [chairs]*
4.	A pencil cost 25 cents, and a sticker costs 10 cents less. How much do a pencil and a sticker cost altogether? A pencil = 25 cents A sticker = 25 cents – 10 cents = 15 cents A pencil and a sticker cost 25 + 15 = **40 cents**	*40 [cents]*
5.	 Every week she can set aside: \$10 - \$3 = \$7. In 3 weeks, she only can set aside \$7 × 3 weeks = \$21 In **4 weeks**, she can set aside \$7 × 4 weeks = \$28, which will be enough to reach her goal.	*4 [weeks]*
6.	a. How many sides does the new shape have? b. This shape has a name. What is it?  	*a. 6 [sides]* *b. Hexagon*

7.	There are 5+5+5 or 5 × 3 or **15 squares**. 	*15 [squares]*
8.	 Serena will need 5+5+2 = **12 posts**	*12 [posts]*
9.	Bunny Kitten  **20 pounds** 5 boxes/units = 20 pounds 1 box/unit = 20÷5 =4 pounds Bunny is represented by 4 boxes/units, which equal 4 boxes × 4 pounds = **16 pounds**	*16 [pounds or lbs.]*
10.	Note that in 5 months she saves $305 each month: $305 × 5 = $1525 12 months – 5 months = 7 months, when she saved $215 per month The first 7 months, she saved $215 × 7 = $1505 Total saving for the year: $1525 + $1505 = **$3030**	*$3030*
11.	The number of tickets Ron and Lydia sold is 90 – 39 = 51 tickets. Ron Lydia  **51 tickets** 3 boxes/units = 51 tickets 1 box/unit = 51÷3 = 17 tickets Ron has 2 units = 17×2 = **34 tickets**	*34 [tickets]*
12.	Smaller number Larger number  1224 **4500** From the drawing the two boxes worth 4500 – 1224 = 3276. One box or one unit = 3276 ÷ 2 = **1638**, and this is the smaller number. The larger number is 1638 + 1224 = **2862** To check: 1638 + 2862 = 4500 ✓ and 2862 – 1638 = 1224 ✓	*1638 and 2862 (in any order)*
13.	 **5 + 4 + 3 + 2 + 1 = 15**	*15 [handshakes]*
14.	 **$3** **7/10 (food)** **$3** **$3** **7/10 (food)** **$3** After we split every unit into 2 parts, every 3 units = $3. Then each unit is $1. Since there are 20 units, Zach's allowance was **$20.** To check: 7/10 of $20 = $14. Remaining allowance = $20 – $14 = $6. Half of $6 = $3 ✓	*$20*

15. Notice that she borrowed the least number of books in October; it's best to start drawing from the smallest number to the largest.

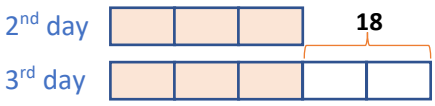
53 [books]



To find the value of the 5 equal boxes, we subtract 15 from 110. 110 - 15 = 95
In October, she read 95÷5 = 19 books. In August, she read 19 × 2 = 38 books, and in September, she read 38 + 15 books = **53 books.**
To check: 19 + 38 + 53 = 110 ✓

16. Since the first day she read 2/5 of the total pages, the second and third day combined comprise 3/5 of the total pages.
The ratio of second day to third day is illustrated as follow:

120 [pages]



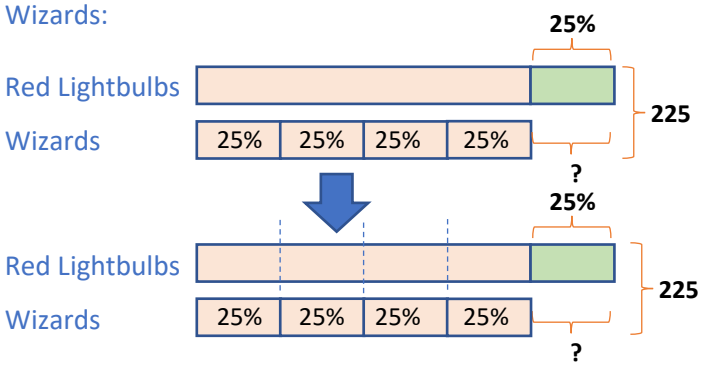
From the drawing, we can find one box or one unit worth 18÷2 = 9 pages.
Since the total units/boxes is 9, we can find the total pages for 2nd and 3rd day = 9×8 = 72.

The drawing for the number of pages from the first day (2/5) and second+third day (3/5):

From the drawing, since 3 boxes/units worth 72 pages, then 1 box/unit = 72÷3 = 24
Total pages = 5 units = 5×24 = **120**

17. We draw as follow to illustrate the Red Lightbulbs solved 25% more problems than the Wizards:

25 [problems]



From the drawing, 9 equal boxes worth 225.
One box/unit = 25

To tie the score, we need to have the Wizard solve **25 additional problems**.

18. First, we can calculate the number of handshakes of 10 students to the 15 other people they don't know: 10 × 15 = 150.
The number of handshakes among the 10 students = 9+8+7+6+5+4+3+2+1 = 45 (see question number 13 on how to get this solution).
Total handshakes = 150 + 45 = **195**

195 [handshakes]