



## More Drawing!

**Kinder & First Grade: solve at least 3 problems.**  
**Second & Third Grade: solve at least 7 problems.**  
**Fourth Grade and above: solve at least 12 problems.**

		<i>Answer</i>
1.	Holly, Katsuki, and Romy each drew two snowmen. Holly and Katsuki placed a hat on each of their snowmen. Romy did not. How many of snowmen had hats?	<i>4 [snowmen]</i>
2.	There were 5 red balloons and 7 blue balloons to give away. Some kids came by and got their balloons. Now there are only 3 blue balloons left. How many balloons were picked?	<i>9 [balloons]</i>
3.	Johana's family loves biking. Her mom and dad, each has two bicycles. Johana and her little brother, each has 1 tricycle. How many wheels are there in all? <i>Total wheels: 4 (mom) + 4 (dad) + 3 (Jenna) + 3 (little brother) = 14 [wheels]</i>	<i>14 [wheels]</i>
4.	Josephine cut out 5 paper flowers. She wanted to decorate two walls in her room with paper flowers. She wants to have 8 paper flowers in each wall. How many more paper flowers did she have to cut? <i>The number of paper flowers she needs = 8 + 8 = 16</i> <i>She needs 16 – 5 or 11 more paper flowers to cut.</i>	<i>11[paper flowers]</i>
5.	During the spring break, Kiyoshi made 18 cranes out of blue origami papers and 13 cranes out of green origami papers. He gave some cranes to Naomi and he had 15 cranes left. How many cranes did he give to Naomi? <i>18 + 13 – 15 = 16 cranes gave to Naomi</i>	<i>16 [cranes]</i>
6.	A local restaurant has 12 tables set up. Each table can seat 4 people. At around noon, all seats are taken except 7. How many people are sitting down and enjoying their meals? <i>12×4 = 48 seats at the restaurant</i> <i>48 – 7 = 41 people are sitting</i>	<i>41</i>
7.	Ryan is 4 years older than his sisters who are twins, Reanna and Anna. If you add all of their ages together, the sum is 19. How old is Ryan?  Reanna <input type="text"/> Anna <input type="text"/> Ryan <input type="text"/> 4  <i>3 units: 19 - 4 = 15</i> <i>1 unit = 15÷3 = 5</i> <i>Reanna's age = Anna's age = 5 years. Ryan is 4 years older: 5 + 4 = 9</i>	<i>Ryan: 9 [years old]</i>
8.	The bicycle rack at Emiko's school has two identical rows. When she arrived this morning, every bike slot on the first row of the bicycle rack was filled. In the second row, there was one spot left in the middle. Emiko parked her bicycle in that last middle spot. There were four bicycles to the left of Emiko's. How many bicycles were in the bicycle rack (including Emiko's)?  <i>If Emiko's bike was in the middle and there are 4 bikes to the left of Emiko's, there must be 4 + 1 + 4 = 9 bikes in each row. Since there are 2 rows, then there are 2 x 9 = 18 bicycles.</i>	<i>18 [bicycles]</i>



9. This year, Caroline entered 25 of her arts to a competition. The number of her arts that received special recognitions are 7 more than the ones did not receive any recognition. How many of her arts that got special recognitions?

No recognition  } 25  
 Got recognitions  7

2 units:  $25 - 7 = 18$   
 1 unit =  $18/2 = 9$   
 $9 + 7 = 16 \rightarrow 9$  received no recognitions and 16 got special


16 [special recognition]

10. Kahini had \$36. She spent 1/6 of her money on a book. Then she spent 2/5 of her remaining money on a calculator. How much money did she spend altogether?

Money spent on book:  $1/6 \times \$36 = \$6$ . Money left over after buying a book:  $\$36 - \$6 = \$30$ .  
 Money spent on a calculator:  $2/5 \times$  remaining money =  $2/5 \times \$30 = \$12$ . Kahini spent:  $\$6 + \$12 = \$18$ .  
 You can also Draw a Model.

\$18

11. Mrs. Nestlee baked 9 trays of cookies. There were 20 cookies in each tray. She gave 1/5 of the cookies to her friends and 4/9 of the remainder to her sister. She then packed the rest of the cookies equally into 4 packets. How many cookies were there in each packet?


She baked a total of 180 cookies. 

$4/5$  of 180 = 144. She has 144 cookies left after she gave 1/5 of her cookies.  
 $4/9$  of 144 = 64. She gave 64 cookies to her sister.  
 So, the number of cookies left after that is  $144 - 64 = 80$  cookies. If she packed the cookies equally into 4 packets, each packet would have  $80 \div 4 = 20$  cookies.

20 [cookies]

12. Mikhail and Jenna weighed their dogs. Mikhail's dog is 18 pounds heavier than Jenna's dog. As a matter of fact, the weight of Jenna's dog is 3/5 the weight of Mikhail's dog. What is the total weight of the two dogs?


Mikhail's dog  18  
 Jenna's dog

Since the weight of Jenna's dog is 3/5 of the weight of Mikhail's dog,  


We divide the model of Jenna's dog into thirds and Mikhail's dog into fifth.  
 You will notice that the 18 lb. represents 2 units. Each unit: 9 lb.  
 Since there are 8 total units:  $9 \text{ lb.} \times 8 = 72 \text{ lb.}$

72 [lb.]

13. Three friends shared a basket of strawberries. Sandilya got 2/7 of the strawberries. Jack got 33 more strawberries than Sandilya. Francis got 78 strawberries. How many strawberries were in the basket?

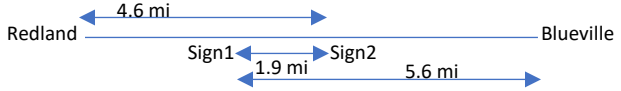


3 units  $\rightarrow 111$   
 1 unit  $\rightarrow 111/3 = 37$   
 7 units  $\rightarrow 7 \times 37 = 259$

259 [strawberries]

14. Bicycling from Redland to Blueville on the Rocky Trail line, I passed a sign saying, "Blueville 5.6 miles." After riding for 1.9 miles, I passed another sign saying, "Redland 4.6 miles." How far is it from Redland to Blueville if you travel on a Rocky Trail line?



The second sign is  $(5.6 - 1.9)$  or 3.7 miles from Blueville and 4.6 miles from Redland. Therefore, it is  $4.6 + 3.7 = 8.3$  miles from Redland to Blueville.



8.3 [miles]

15. A local artist made dandelions out of wires. She cut a wire into two pieces. The length of the shorter piece is  $\frac{2}{11}$  of the total length of wire. Three times the shorter piece is equal to 147 cm. What is the length of the longer piece?

Draw the bar model out of 11 units. Shorter wire: 2 units. Longer wire: 9 units.  
147 cm represents 6 units because three times the shorter piece is equal 147 cm.





Shorter piece   
Longer piece 

147 cm

Therefore, 1 unit:  $147/6 = 24.5$ . The longer piece has 9 units:  $9 \times 24.5 = 220.50$  cm.

*220.50 [cm]*





16. The ‘Everything is Fun’ store had a total of 350 red and blue magic pens. After  $\frac{1}{3}$  of the red magic pens and  $\frac{1}{2}$  of blue magic pens were sold, there was an equal number of red and blue magic pens left. How many blue magic pens were there at first?

After: Red   
Blue   
Before: Red   
Blue 

Before: total of 7 units  $\rightarrow 350$   
1 unit:  $350/7 = 50$  pens  
4 units:  $4 \times 50 = 200$  blue pens

*200 [blue pens]*

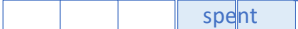
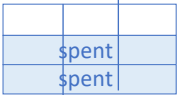
17. The lengths of the sides of a quadrilateral are consecutive multiples of 6. If the perimeter of the quadrilateral is 156 inches, how long is the longest side?

1<sup>st</sup> side:   
2<sup>nd</sup> side:   
3<sup>rd</sup> side:   
4<sup>th</sup> side: 

$6 \times 6 = 36$  inches  
 $156$  inches  $- 36$  inches =  $120$  inches  
4 units  $\rightarrow 120$  inches  
1 unit  $\rightarrow 120/4 = 30$  inches (shortest side)  
 $30 + 6 + 6 + 6 = 48$  inches

*48 [inches]*

18. Mrs. Dorsey and Mrs. Kowalsa went shopping for Easter celebration. They have a total of \$280 to spend. After Mrs. Dorsey spent  $\frac{2}{5}$  of her money and Mrs. Kowalsa spent  $\frac{2}{3}$  of his money, they each had an equal amount of money left. How much did they spend altogether?

Mrs. D   
Mr. K 

\$280

First divide all parts, so, that it would be the same as the smallest unit. In all, there should be 14 small equal units.  
Then  $280 \div 14 = \$20$  per 1 unit.  
Mrs. D spent 2 units = \$40  
and Mrs. K spent 6 units =  $6 \times \$20 = \$120$ .  
Total spent:  $\$40 + \$120 = \$160$

*\$160*

*Solution is available on April 23, 2021 at [www.mathinaction.org](http://www.mathinaction.org)*