Section 3

Suggestions for helping your child find the answers
Grade 2, Worksheet I

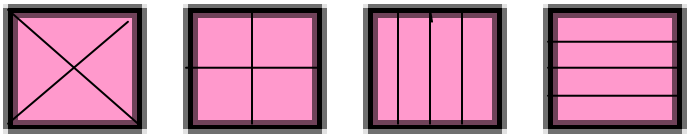
1. **Answers: a. 478, 488, 508; b. 685, 785, 885, 985** Your child will first need to recognize whether the numbers in each pattern are increasing or decreasing. The numbers in the first pattern are increasing by 10. The numbers in the second pattern are increasing by 100. Children may have difficulty reading 1,085. They may not have encountered numbers in the thousands in school yet. You may want to explain that ten hundreds equal one thousand, which comes up in problem 6.

2. **Answer: 1:00, 3:30, 6:00, 8:30** If you have a clock with movable hands, you can have the child count forward from one o'clock 2½ hours. They can tell the hour by looking at where the short hand is pointed, or where it recently passed. The long hand points at the minutes. They can find the minutes by counting forward individual marks starting at 12, or they may "count by fives" for each number past 12. You may want to point out that anytime it is half past an hour (:30), the minute hand is always pointing at the 6 and the hour hand is always exactly in the middle between two numbers. When the time is exactly on the hour (:00), the minute hand is always pointing to the 12 and the hour hand is always pointed directly at a number, indicating that hour.

3. **Answer: 18 wheels** Ask the child if he or she should count Mario's sister, which they should do. So that's 6 children total, each with a tricycle. The child can put out 3 counters for each of the six children or draw such a picture. Encourage them to "count by 3s" to find the answer. They can say intermediate numbers quietly but emphasize the multiples of three, as in "1, 2, **3**, 4, 5, **6**, 7, 8, **9**, 10, 11, **12**, 13, 14, **15**, 16, 17, **18**". Or the child might just say "3, 6, 9, 12, 15, 18."

4. **Answer: $1, $6** Your child may not have encountered counting change to a dollar. If you have coins, allow your child to use them to count the amount given in the problem. After identifying the amount saved for one week ($1.00), your child may need prompting to think about the other five weeks in which Destiny also saved $1.00. Think: $1.00 + $1.00 + $1.00 + $1.00 + $1.00 + $1.00 = $6.00.

5. **Answer: will vary** Any of the following divide the square into *fourths*, as do other shapes. The main point is for the child to show 4 equal parts of each square.



6. **Answer: 10, 10, 100, 200** With limited exposure to numbers in the thousands, your child might draw a picture or use cut-outs of the *tens* and *hundreds* shown to solve this problem. They may even use a separate piece of paper since a drawing will take up much space. There are 10 hundreds in each thousand. Your child may be able to

recognize that 10 *hundreds* taken 2 times is 20 *hundreds* or 2,000. There are 10 *tens* in each hundred; there are 100 *tens* in each *thousand*. One hundred *tens* counted twice is 200 tens or 2000 small squares.

7. **Answer: 800 items** The purpose of this question is to have the child round each of the three numbers to the nearest hundred. 482 is closest to 500. 216 is closest to 200. 91 is closest to 100. The child then adds 500 + 200 + 100 = 800. You might point out that sometimes we don't need to know an exact answer—the purpose of an estimate is to help develop "number sense." "Explain your answer" and "How do you know" encourage children to review and monitor their thought process.

8. **Answer: 5 pints is less than 3 quarts** This problem introduces your child to capacity of pints and quarts and how they are related to one another. If you have pint and quart containers at home, use them to demonstrate their capacity. If your child is ready for a discussion on fractions, you might mention that 5 pints would be the same as 2½ quarts, and show them how to write that number.

Suggestions for helping your child find the answers
Grade 2, Worksheet II

1. **Answer: a. 50, 65, 70; Increasing by 5; b. 52, 32, 22; Decreasing by 10.** The purpose of this problem is to have the child identify the patterns, and to determine whether the numbers in the pattern are increasing or decreasing in value, and by how much. If your child doesn't recognize the pattern by seeing it visually, have them say the numbers out loud, in order—sometimes the verbal reinforcement will make the pattern more obvious.

2. **Answer: a. 9; b. 2.** Your child may not have experience with balancing an equation. When going over the problem with the child, be sure to use the Hint to help. You might take out a pencil or ruler and balance it on one finger, and show them that anything put on one side has to be the same as something put on the other side, for it to balance.

3. **Answer: Yes, Joshua has enough money. 3 pizzas cost $12.00 and 2 six packs of soda costs $4.00. Joshua only needs $16.00.** Your child may like to use dollar bills or may choose to draw a picture to solve this problem.

4. **Answer: 12 and 3.** Children will have to remember that *sum* means the answer to an addition problem. Therefore, the two numbers will have to be added together to equal 15. Making a chart of the various combinations would be helpful. For example, 1 and 14, 2 and 13, and so on, all add to 15. The child will have to figure out which two numbers meet the criteria *"One number is 9 more than the other."* Children may also guess, check, and revise.

5. **Answer: a. 6, 8, 10 hands; b. 10 stickers c. she could double the number of dolls, or add the number of dolls to itself, to get the number of hands.** The purpose of this problem is to have the child complete a chart by counting or by identifying a pattern. The number of hands also represents the number of stickers needed per doll. Later, this will become a multiplication problem; $5 \times 2 = 10$. For now, the child might "act it out" if they are having difficulty understanding what the problem calls for. Question c is there to evoke a generalization on the child's part—they probably won't know what the question means. First talk to the child about different numbers of dolls she might have—10, 15, and so forth. Then ask if there's a way to tell someone else how to find the number of hands, if you know the number of dolls.

6. **Answer: 9, 12, 15, 18 to complete the chart; 18.** The purpose of the problem is for children to recognize the pattern and complete the chart. Children may simply count by 3s or may draw a picture using sets, tally marks, or some other illustration to solve it. This problem should further develop the relationship of *yards* to *feet.*

7. **Answer: See below.** Be sure to discuss with the child the "alligator mouth" way to remember which number is greater. Ask them to explain how they decided each symbol.

a. 882 **(>)** is greater than 881
b. 327 **(=)** is equal to 327
c. 310 **(>)** is greater than 301
d. 123 **(<)** is less than 132

Suggestions for helping your child find the answers
Grade 2, Worksheet III

1. **Answer: odd.** Eleven is an odd number, as the picture on the worksheet suggests, because when you try to "pair up" eleven cubes, you have one left over. An odd number is always like this—in arithmetic, this means that, when you divide an odd number by 2, you always have a remainder of 1. Your child won't understand the latter explanation, but he or she should understand about "pairing up" counters to see if each counter has a match, or if there's one left over.

2. **Answer: 55 minutes.** The problem will later become a multiplication problem, 5 × 11, but at this point can be solved by counting by 5s, drawing a picture, or some similar way.

3. **Answer: 7.** Mention to the child that no tax is involved in this problem. You might discuss with them what "tax" refers to, and how such money is spent to improve our quality of life. If you have nickels and pennies, allow your child to use them to help solve this problem. They may also opt to draw a picture to solve it. Some may use repeated addition, 7 + 7 + 7 + 7 + 7 + 7+ 7, to solve it.

4. **Answer: Yes. Alex will spend $2.20 to buy one of each of the toys. $2.20 is less than $2.50.** Again, mention that no tax is involved in this problem. Your child may want to use coins and a dollar bill or may choose to write an addition problem to resolve this scenario.

5. **Answer: 81; 81 – 33 = 48 or 81 – 48 = 33.** Your child may not have experienced addition with regrouping. You may choose to explain that when adding 8 + 3 in the ones place, the answer, 11, is not written in the ones place. The one in the tens place is regrouped into the tens place. Your child may also solve by counting on from 48 or by drawing a picture of corresponding tens and ones to add. A website with virtual manipulatives might interest your child, and be similar to what they have been using in school. Go to http://nlvm.usu.edu/en/nav/frames_asid_154_g_1_t_1.html?from=category_g_1_t_1.html for a nice applet for this problem.

Your child should realize that subtraction can be used to check an addition problem, but they might not have done it with numbers this large before. Be sure to discuss this with the child.

6. **Answer: about 3 inches; about 7 centimeters; part a has a smaller result than part b because inches are longer than centimeters, so it takes fewer of them to measure a distance.** Your child will need an inch and centimeter ruler to solve this problem. When measuring in inches, the actual measurement is 2¾ inches, which is nearest to 3 inches. The leaf is nearly 7 centimeters long. Be sure to determine if the child is lining up the end of the ruler (denoting 0, which isn't written) with the end of the leaf.

7. **Answer: a. 6 faces; 8 vertices, 12 edges.** This may be the first time your child has encountered the geometry concept of *faces, vertices,* or *edges*. A face is a flat surface on a solid figure. An edge is a line where two faces meet. A vertex is a point where three edges meet; also called a "corner".

8. **Answer: 20.** You might take out a 2-liter cola bottle to demonstrate filling a container. Each time you add another bottle of water, you'd count by 2 more. Essentially this problem involves counting by 2s from 0 up to 40. Since there are twenty such numbers, it would take 20 2-liter bottles to fill a 40-liter aquarium.

Suggestions for helping your child find the answers
Grade 2, Worksheet IV

1. Answer: will vary The child should say something about the pattern repeating every 4th time and that it's made of arrowheads or triangles. They might say the first two triangles point up, followed by one pointing right, followed by one pointing down. Then this core repeats over and over. The main point of this question is for the child to generalize, in his or her own words, what makes it a pattern.

2. Answer: 7:00 and 1:00 Use a clock to remind your child that the small hand on the clock is the hour hand and that the big hand is the minute hand. Have them first locate the hour hand on the three and move it four numbers ahead. For 10 more hours, they can start with the hour hand at 3, then count forward ten more hours, remembering that, past 12, they start over at 1 for 1:00 o'clock.

3. Answer: $1.75 Remind your child that there are 7 days in a week. If Bella earns $.25 per day, you can make this into an addition problem to find the total for the week: $.25 + $.25 + $.25 + $.25 + $.25 + $.25 + $.25 = $1.75. However, the child might know that 4 quarters make a dollar, and three more is 75¢, and so just say the answer without formally adding. (Note: your child might use 25¢ instead of $0.25—either is acceptable, as long as they don't write 0.25¢.)

4. Answer: Billy, 3 This problem involves comparing two numbers in the teens. If your child has difficulty, have them line up 17 circles beside 14 circles, and mark off pairs together. The 3 circles left in the group with 17 shows *how many more* 17 is than 14.

5. Answer: >. This problem returns to last week's problem about using the symbols < (less than) and > (greater than). Ask your child if they remember about the alligator's mouth, and what that picture means.

6. Answer: 16 sides Have your child trace around the edge of each rhombus, and when they change direction, count one more. Or they might mark each edge as they go, to keep from counting sides over again. Some children will immediately say 4, 8, 12, 16—the group has 16 sides. They will be adding 4's repeatedly, or counting by 4, a precursor to multiplication.

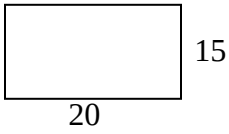
7. Answer: 4 sides. This question will be difficult for some children as they will want to count the interior lines of the figure, just as they did above. However, when shapes are joined together to create new shapes, sometimes edges that were previously sides become interior features, and so aren't sides of the new shape. Tell your child that the side of a figure is just the outside edge.

8. 20 inches. You might ask your child if they know what *perimeter* means—it's the distance around the outside of a polygon. He or she can practice counting by 2s around the edge of the shape, marking off the pieces as they go.

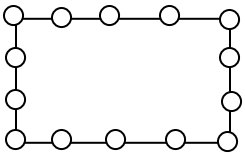
9. Answer: Rule: add 10 to the input; 24, 18, and 65 go in the chart. By looking at the table, the child should discover the pattern of adding 10. If they don't, take the input and output pairs one at a time, being sure they know what "input" and "output" mean. Use the picture of a function machine to help them visualize these terms. Then give them some other input numbers and see if they can tell you the output. Once they see this pattern, he or she should be able to finish the chart.

Suggestions for helping your child find the answers
Grade 2, Worksheet V

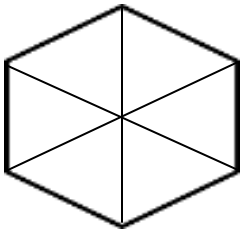
1. Answer: 70 feet Suggest that your child draw a picture of the rectangle, looking down from above, and label the length of the sides as shown below. Then they can see that the total length, or *perimeter*, is 20 + 20 + 15 + 15 or 70 feet.



2. Answer: 14 poles Again suggest a "top down" drawing like the one above, but put in poles every 5 feet. The child can then count the poles.



3 Answer: 6 triangles, 1/6 You can have your child draw the triangles in the hexagon to determine the number of triangles that would fit inside it. You may also wish to use pattern blocks. The fraction is 1/6 because the triangle is one of 6 equal parts that make the hexagon.



4. Answer: 30, 33; The pattern is increasing by 3 so the 7th number is 30. By looking at the pattern from left to right, the child can probably determine that it increases by three each step. If not, have them say the numbers out loud and put down that number of counters for each new cell. The seventh number would be found by adding three to the 6th number in the table. You would do the same to determine the eighth number.

1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
12	15	18	21	24	27	**30**	**33**	36	39

5. Answer: 514 baseball cards. This word problem asks the child to find out how many baseball cards Toby has. The child only knows that Al has 642 and Toby has 128 less than Al. This might be difficult for your child to determine what he/she needs to do to

solve the problem of comparing numbers. Once the child determines that they need to subtract to find out Toby's amount, they can set up the problem. 642 – 128 = 514

If your child hasn't done subtraction problems where regrouping—borrowing—is required, you can show them how with drawings of base ten materials. Or you can let them use a calculator.

6. Answer: Ashley, 10¢ more Your child might add up the amount of money for each girl and compare, then subtract Chelsea's amount from Ashley's amount. Chelsea has $2.25 and Ashley has $2.35. Therefore, Chelsea has 10¢ more to spend. You may wish to give your child money to help them count the coins. Or, if they know that $1 = 4 quarters, he or she can mark out $1 for Chelsea and 4 quarters for Ashley, two times, leaving Chelsea's quarter compared to Ashley's 3 dimes and a nickel. Since a quarter equals two dimes and a nickel, you can mark out those two amounts, leaving Ashley with a dime as the only unmarked coin.

Chelsea- 

Ashley- 

7. Answer: odd; I know it is odd because if I try to pair up 13 crayons, 1 of the crayons won't have a match. Have the child use 13 counters or draw 13 crayons and try to match them up. If there are no crayons left without a match, it is an even number. Use this opportunity to look for "partners" that make even numbers. Remind them of doing this on Worksheet III two weeks before. Give them some other numbers of objects, to see if they can determine *even* or *odd*.

8. Answers: will vary Help your child make a paper airplane, and you make one too. Have them measure their airplane's flight several times before doing the problem. You'll have to pick a starting line, and then measure on a straight line from the starting line to the nose of where the plane lands—don't try to measure its twists and turns. Rounding will also be involved. The purpose is for the child to practice measuring in inches, and also practice subtracting with several digits involved. If the child doesn't know how to regroup for subtraction, have them estimate and then allow them to use a calculator.

Suggestions for helping your child find the answers
Grade 2, Worksheet VI

1. Answer: 9 ounces

The main point of this problem is to introduce the concept of equality, a concept central to algebraic thinking. If you have apples and bananas at home, you might show them visually what this would look like. Ask them how much weight, total, are the apples (36 ounces). Then ask—if 4 bananas have to be the same weight, how much would each banana weigh? The child may not know to divide, so they can guess different weights for the bananas until they find a weight—9 ounces—for which 4 of them gives 36 ounces. This problem is a beginning to algebraic thinking and solving equations.

2. Answer: 42, 71, and 17 Children can count the blocks. They should know that the rod is equal to 10. Count by 10's then add two more to get 42. They can draw more rods and blocks beside those pictured to show adding 29 more. The difficult part will be to regroup 2 single blocks and 9 single blocks to give another rod and 1 block, giving 71 in the end.

Similarly, they can go back to the original group and remove 2 rods and 5 single blocks, but then need to regroup the 4 rods and 2 blocks to 3 rods and 12 blocks before beginning.

3. Answer: She will use fewer yardsticks than rulers. A yard is equal to 3 feet. A ruler is equal to 1 foot. If you have a ruler or yardstick at home, practice measuring a side of a room to see the difference. The important part is for the child to understand the inverse relationship at work. It takes fewer repetitions of a larger unit to go a certain length, than of a smaller unit.

4. Answer: 12 cups Use a measuring cup and have the child fill it four times with water, calling it 1 quart. Then repeat that action 2 more times, getting 12 cups when they say "that's 3 gallons." If you don't have a measuring cup handy, the child can draw a picture to show that 12 cups would equal three gallons.

5. Answer: Pencil A is longer than pencil C. If your child has difficulty understanding what they are to do, take 3 pencils of obviously different lengths, and go through the statements comparing length. Have the child draw their own conclusion, with you simply asking leading questions. (If you don't have pencils handy, substitute another such length model or have the child draw a diagram of the pencils.)

6. Answer: pounds Discuss with your child that we have different ways to measure weight, height, volume, etc. It's important for them to learn which of the standard measures is called for in measuring something. If someone asked how tall they are, for example, it wouldn't tell them anything to say "I weigh 43 pounds." If the child has a backpack at home, fill it with books and use the family scale to see how much it actually might weigh.

7. Answer: 65 more ants Your child should be able to set up the subtraction problem as 234-169. This might be your child's first exposure to regrouping or "borrowing." If so, and you don't have manipulatives to show them, allow them to use a calculator to solve the problem. For a nice way to practice using manipulatives on a computer, go to http://nlvm.usu.edu/en/nav/frames_asid_155_g_1_t_1.html?from=category_g_1_t_1.html.

8. Answer: will vary The important point of this problem is for the child to estimate their own height in feet, and then use their height to estimate other heights. This teaches the child to use common sense and benchmarks when measuring items, which is a valuable skill for use in everyday life. Talk through the parts of this problem, and then go with them through the house, observing as they proceed.

Suggestions for helping your child find the answers
Grade 2, Worksheet VII

1. **Answers: See bold numbers. Colored light green would be the columns under 2, 4, 6, 8 and 10; colored light red would be the columns under 5 and 10; colored both green and red would be the 10s column.** This problem provides a chance for your child to practice counting by 2s and by 5s. If they have trouble, have them count by 2s by pointing first to 2, then skip a number and move their finger to 4, and so on. The verbal and kinesthetic reinforcement should help them learn to count by 2s. Similarly for counting by 5s. Be sure to discuss with them the visual pattern that emerges, with columns all one color.

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1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	**18**	19	20
21	22	23	**24**	25	26	27	28	**29**	30
31	32	33	34	35	36	37	38	39	40
41	**42**	43	44	45	46	47	48	49	50
51	52	53	**54**	**55**	56	57	58	59	60
61	62	63	64	**65**	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	**87**	88	89	90
91	92	93	94	95	96	97	98	99	100

2. **Answer: An even number ends in 2, 4, 6, 8, or 0. An odd number ends in 1, 3, 5, 7, or 9.** Previously the difference between *even* and *odd* numbers was approached as "even numbers of objects can always be paired up, with none left over. Odd numbers always have one object left unmatched, when you try to pair them up." This method works for small numbers, but as numbers get larger, you want students to notice that they can also tell even from odd by looking at the *ones* digit.

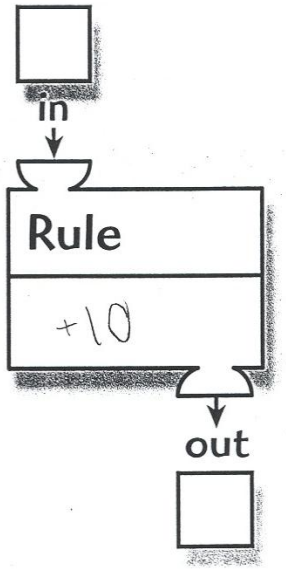
3. **Answer: Y, 4, Z, Y, 5; the pattern has Z and Y repeating, but the numbers after each Y go up by 1 every time through** If your child has trouble seeing the pattern, have them point to the first letter, Z, on the left, then say each new term as they point to it, moving to the right. Z restarts the pattern.

4. **Answer: 30 marbles.** Your child might need to use manipulatives or draw a picture to show the 6 bags, with 5 marbles in each bag. This problem is an introduction to repeated addition by 5, and could also be solved by $5 + 5 + 5 + 5 + 5 + 5 = 30$. Or the child might simply count by 5s, going 5, 10, 15, 20, 25, 30. This type of problem is the beginning of understanding multiplication as six groups of 5, or $6 \times 5 = 30$.

5. **Answer: > since 3 quarters is 75¢, which is greater than 6 dimes or 60¢**. You may wish to give your child coins to help them count the change. Remind them to make the symbols for less than and greater than look like an alligator's mouth wide open. The gator always wants to eat the greater number.

6. **Answer: 15 sides.** Encourage your child to use repeated addition to solve the problem, 3 + 3 + 3 + 3 + 3 = 15. Or, they might simply count by 3s—3, 6, 9, 12, 15. Some might even realize that 3 × 5 = 15.

7. **Answer: Rule: subtract 2; the missing number is 6.** You might need to remind your child of what an "input-output" machine does. It is set to do the same thing to any number that goes into the input. The child needs to look at several input-output pairs together, to see what the machine seems to be doing. In this case, if 6 goes in, 4 comes out; if 9 goes in, 7 comes out; if 4 goes in, 2 comes out. If this is not enough information for the child, then give them some more input-output pairs. A visual example like the one below might help. This child constructed a "+10" input-output machine.



in	out
10	20
2	12
2	12
3	13
4	14

8. **Answer: 8 + <u>6</u> = 10 + 4** Children have a difficult time understanding what *equal* means. This balancing situation is a physical embodiment of what *equality* means in algebra. Suggest that your child draw boxes to equal the same number as on the right. Ask him or her to solve the right side of the problem first, 10 + 4. They know that this equals 14. Therefore, the left side of the problem must equal 14 too. Ask your child what number, plus 8, would equal 14. They might count up to find the answer or subtract 8 from 14.

Suggestions for helping your child find the answers
Grade 2, Worksheet VIII

1. Answers: 19, 32, 36, 45. A hundred's chart or writing numbers on a number line might help students put these numbers in order. Students coming into 2nd grade should be able to read numbers from 1 to 100 and they should realize that the right-most digit tells the *ones* while the 2nd digit from the right tells the *tens*.

2. Answer: No. He does not have enough money to buy the ball. He only has 46 cents. If your child has trouble with this problem, use real coins and have the child tell how much each is worth in turn.

3. Answer: 8:30 a.m. If your child had trouble with time, find out if they understand which hand stands for hours. A common mistake is either saying 7:12 or 12:7. Help them by talking about "o'clock". Practice by making a clock and just moving the hour hand.

4. Answer: 14. A common mistake is forgetting to count themselves—the child might simply add 6 and 7 because they see those numbers in the problem. Children should be encouraged to draw a diagram for this problem, then count the marks they made.

Bus x x x x x x Y x x x x x x x
6 ahead you 7 behind

5. Answer: 123, 253, 547, 574, 808, 828. Hopefully the child will look at the hundreds column first for placement. If two numbers start with the same they then must go to the tens column and so on.

6. Answers: four-eighths, three-eighths, and one-eighth. Very few children will know how to write these names using numerals, but you might show them to your child. The key idea for them to understand is the last number—eighths—tells how many slices of pizza, all equal, make up the whole pizza. The first number tells the number of those slices being eaten. If using symbols like 4/8, 3/8, and 1/8, the "bottom number" is the *denominator*; the top number is the *numerator*. You should not stress these names with your child, but you can mention them in passing.

7. Answer: 900 Discuss with your child what it means to "round to the nearest hundred." It means to use the hundreds number that's closest to the number you are considering. Your child might mention "front end rounding" which is popular in schools today—if your child does mention this, then ask them to explain that method to you and how they find answers that way.

8. Answer: 910 If you child has not encountered adding 3-digit numbers in which numbers must be regrouped, then you might allow them to use a calculator. You can easily show how to regroup such numbers if you have base-ten blocks to use.

9. Answer: 10 If your child got problems 7 and 8, this should be easy as they can probably tell you the difference in 900 and 910, just by using mental arithmetic.

Suggestions for helping your child find the answers
Grade 2, Worksheet IX

1. Answer: 40. If necessary, suggest that your child draw a picture of the toes and count. This is an example of "skip counting" which is the start of repeated addition and thus multiplication. The child might skip count by 5s, saying 5, 10, 15, etc., up to 40, or skip count by 10s. The child might also add 5 eight times, or add 10 four times.

2. Answer: odd. Your child can use the pictures (top of the dice) to help her or him with this problem. This is also a good time to use manipulatives (pennies, rocks, tiles, etc.) to show 9 counters. Hopefully the child will remember that *even* numbers, when put in two matched groups, will always come out *matched up*, with no unmatched counters. *Odd* numbers, when you try to match them up, always have one leftover counter.

3. **Answer: 20 grams.** This may be difficult for your child because he or she must first determine how much each orange weighs by adding the left side of the left-hand scale together (10 + 5 = 15). So from the left-hand scale, 3 oranges balance 15 grams, so each orange must be 5 grams. Then look at the balance scale on the right. You could explain how a balance scale is like a see-saw. If each orange weighs 5 grams, how much would 4 oranges weigh? 5+ 5 + 5 + 5 = 20 grams.

4. **Answer: 96 cents** Encourage your child to use real money. If your child has difficulty counting quarters, teach them a way to skip count by fives. Draw five dots on the quarter and two dots on the dime. Then just skip count by fives. Money will be a major focus in 2nd grade and you'll want to give your child many opportunities to practice.

5. **Answer: Yes** Two of the ice creams would cost 70 cents, so 96 cents is enough.

6. **Answer: a. About 21 centimeters** b. Thao did not notice that the tape holder was not lined up starting at the left end of the scale, the "zero" point of the scale. Starting on the "0" is an important part of measuring. This problem is a bit tricky for 2nd graders. Your child has to see that the tape dispenser would have to be moved to the zero, or that the measurement is 25 – 4, which is 21.

7. **Answers: a. 2 b. 6 c. 4** These puzzles are sometimes difficult for children because we have some unknowns. Base ten hundreds, tens, and ones will help them "see" what is missing. Money could also help on puzzle b.

a.	b.	c.
3 2 **2**	$7. **3**6	3, 475
+ 3 5	- . 45	+ 11**4**
3 5 7	$ 6 . 91	3,589

8. **Answer: a. $4.50 b. 2/6** If your child has difficulty adding 75¢ six times, allow them to use a calculator. Encourage them to explain when this fraction is called "two-sixths". What does the "sixths" mean, and what does the "two" mean?

Suggestions for helping your child find the answers
Grade 2, Worksheet X

1. Answer: They had the same amount. Read aloud the number names that both Becky and Ben are saying, with your child. Becky is regrouping hundreds when she says "one thousand"; Ben is continuing to count hundreds. Both are legitimate ways to count and both ways come up often in the real world. It will help your child to realize that "eleven hundred" is another name for "one thousand, one hundred", and so forth.

2. Answer: 38 to 40 inches; 70 to 76 inches. Be flexible in accepting an answer from your child as they probably don't know how to add 8½ + 8½ yet. They might add those lengths as 8 inches or nine inches, or intuitively know how to add 8½ itself. The main point of this problem is to review perimeter of a figure, and also that the sides of individual pieces aren't always sides of a different figure when pieces are joined. The actual perimeter of the single sheet is 11 + 11 + 8½ + 8½ inches, and for the three sheets together is 11 + 11 + 8½ + 8½ + 8½ + 8½ + 8½ + 8½ inches. A meaningful way for the child to check and see how close their answer is, would be to take a yardstick or a carpenter's tape measure and actually measure the sides, finding the perimeter as the total length measured.

3. Answer: 3/4 Have your child fold such a sheet of paper and go through the coloring activity. You will probably have to ask them how many pieces the whole paper has been partitioned into—that's where "fourths" comes from—and how many pieces are under consideration.

4. Answer: 32 and 56 The main point of this problem is for the child to skip count, or repeatedly add the same number, which is a foundation for multiplication in 2nd grade.

5. Answer: 10:30 and 1:30 You might have to review with your child that the hour hand is the shorter hand, and for the minute hand, you "count by 5s" as you progress around a clock face. When the minute hand is on **6**, the hour hand should be half-way between two numbers to show that ½-hour has passed.

6. Answer: 8, 7, 6, and 5 Have your child explain to you the place value of digits, and how the smaller numbers—the ones—start at the right and get bigger as you move to the left. Note that this is different from the way they learn to read words and sentences.

7. Answer: 9 This problem might confuse your child as they might not know that they have to use the information in one picture, to help complete the second picture. Since two cylinders balance 3 cubes in the scale on the left, ever time you see 2 cylinders, you can replace them, weight-wise, with 3 cubes. So as you mark pairs of cylinders in the scale on the right, you can add 3 cubes to the right-hand pan.

8. Answer: 10 grams Your child can probably do this problem intuitively or through guess-check-revise, even though they don't know how to divide yet**.** The two cylinders on the left would weigh 30 grams together, so 3 cubes would weigh 30 grams. The child can then ask himself or herself—what number can I add three times, and get 30? Ten, of course.

Thank You!