Suggested Math Plans
May 4 - 8

This week will focus on mathematical thinking and reasoning through rich tasks.

Standards:

Standard 3.NF.A.1 Understand a fraction, 1/b, as the quantity formed by 1 part when a whole is partitioned into *b* equal parts (unit fraction); understand a fraction a/b as the quantity formed by *a* parts of size 1/b . *For example, ¾ represents a quantity formed by 3 parts of size 1/4.*

Standard 3.OA.D.9 Identify arithmetic patterns (including patterns in the addition and multiplication tables) and explain them using properties of operations. For example, analyze patterns in the multiplication table and observe that 4 times a number is always even (because 4 x 6 = (2 x 2) x 6 = 2 x (2 x 6), which uses the associative property of multiplication)

Standard 3.MD.C.6 Measure areas by counting unit squares (square centimeters, square meters, square inches, square feet, and improvised units)

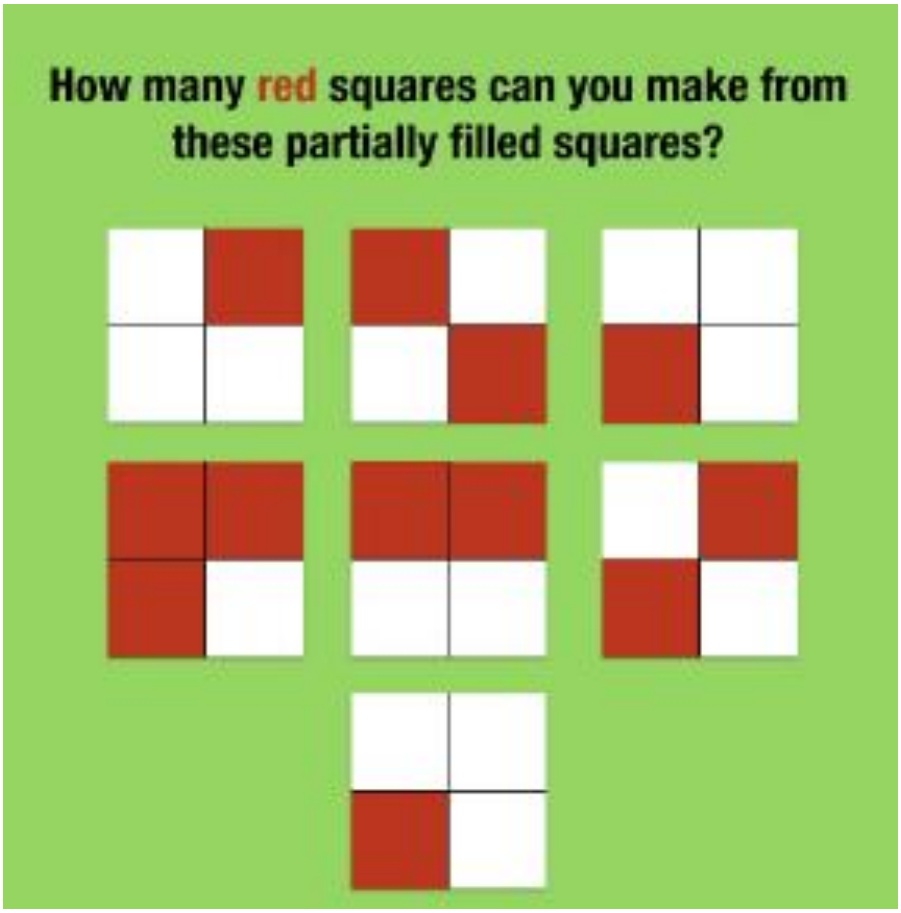
Day 1	Today's focus: Today's focus is on solving thinking and reasoning tasks involving fractions. o Do at least 15 minutes of iReady o Complete today's calendar challenge o Watch "Fractions" on Flocabulary and take the quiz o Day One task o "Captain's Square Puzzle"
Day 2	Today's focus: Today's focus is another thinking and reasoning task for students to consider. This time it involves money and doubling a salary or getting a base pay. Which one would you choose?? o Do at least 15 minutes of iReady o Complete today's calendar challenge o Day 2 task o Mobymax Assigned Lesson: Observe Patterns in the Additions Table

Day 3	Today's Focus: Today's focus is on thinking and reasoning through tasks involving area. o Do at least 15 minutes of iReady o Complete today's calendar challenge o Day 3 task o Solve the answer to "The Seating Chart" on a piece of paper at home! o Click here for The Seating Chart
Day 4	Today's Focus: Today's focus is on using thinking and reasoning to solve computation puzzles. o Do at least 15 minutes of iReady o Complete today's calendar challenge o Day 4 task o "Broken Calculator" Page o Algebraic Reasoning Online game o https://www.mathplayground.com/algebraic_reasoning.html
Day 5	Today's Focus: Today's focus is on observing, thinking and reasoning to determine which picture doesn't belong. It is important to note that on all WODB puzzles, every square can be justified as not belonging. o Do at least 15 minutes of iReady o Complete today's calendar challenge o Day 5 task o IXL Lessons: o Q.3- Find the Order o Q.4- Age Puzzles

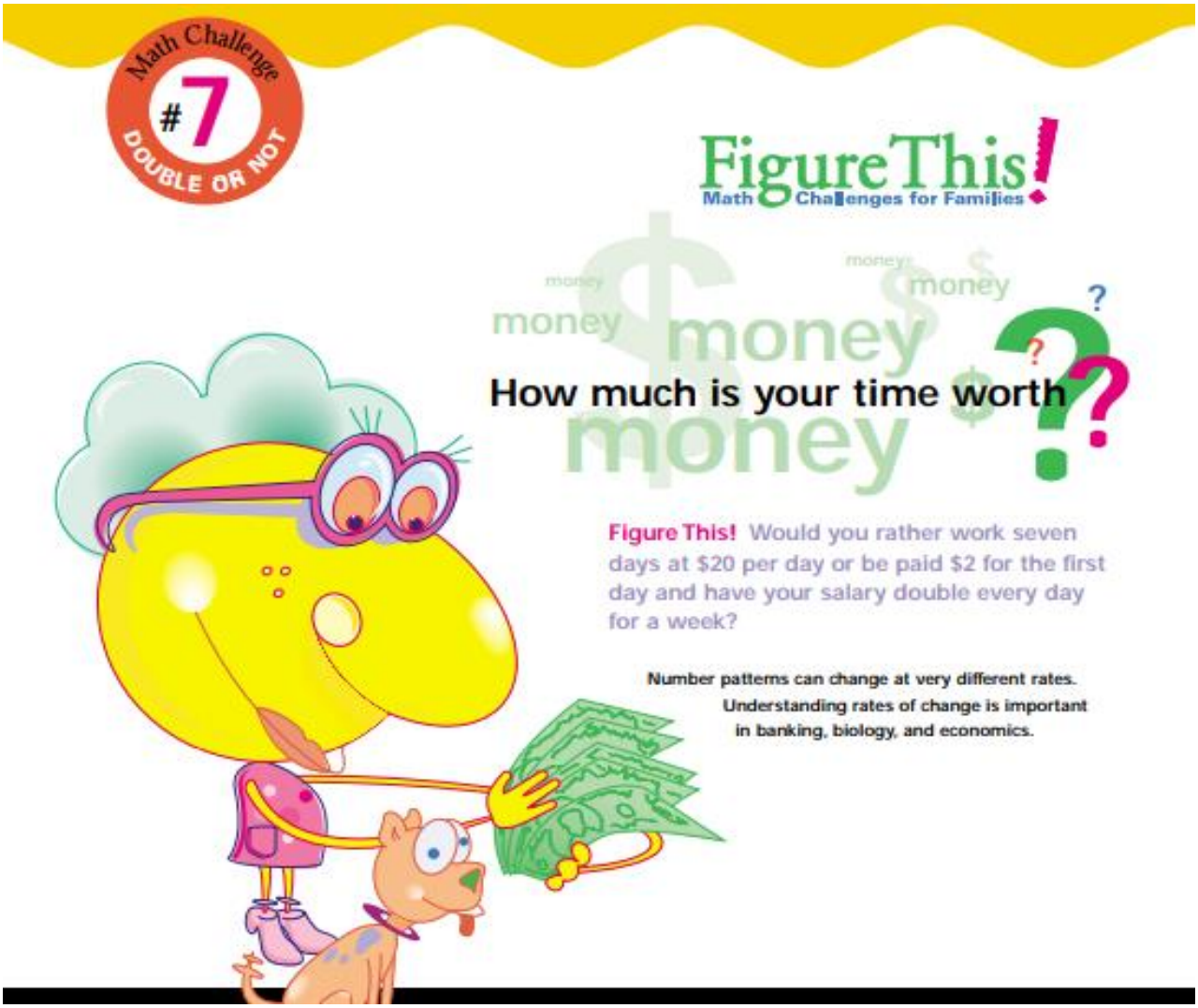
Bonus Activities!

- IReady Lesson: Solve Two-Step Word Problems Using the Four Operations
- IReady Lesson: Understand Patterns

Day 1 Task


How many red squares can you make from these partially filled squares?

Day 2 Task


Math Challenge
#7
DOUBLE OR NOT
FigureThis!
Math Challenges for Families
money
money
money
money
How much is your time worth?
Figure This! Would you rather work seven days at $20 per day or be paid $2 for the first day and have your salary double every day for a week?
Number patterns can change at very different rates. Understanding rates of change is important in banking, biology, and economics.

Day 3 Task

#39 PATIOS

Figure This! Math Challenges for Families

Does bigger perimeter mean bigger area?

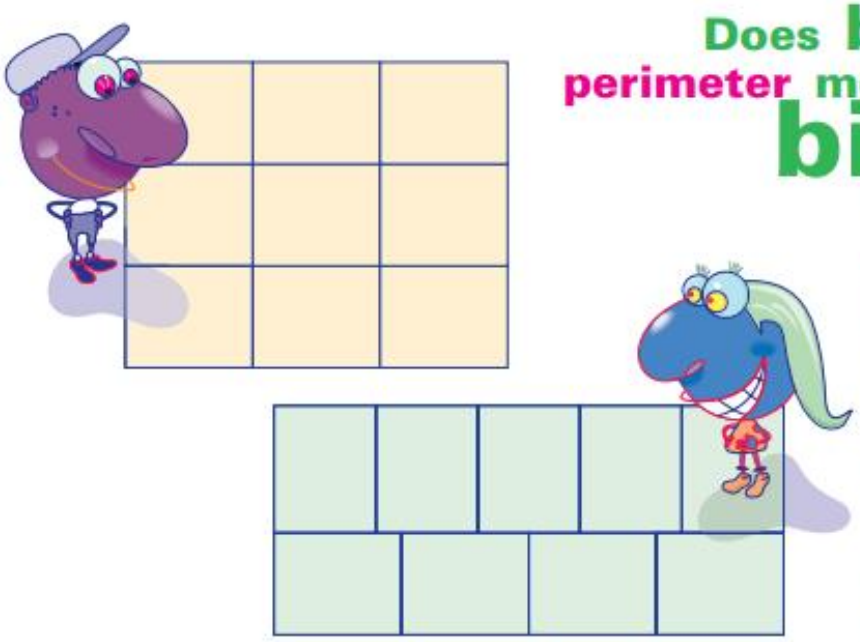


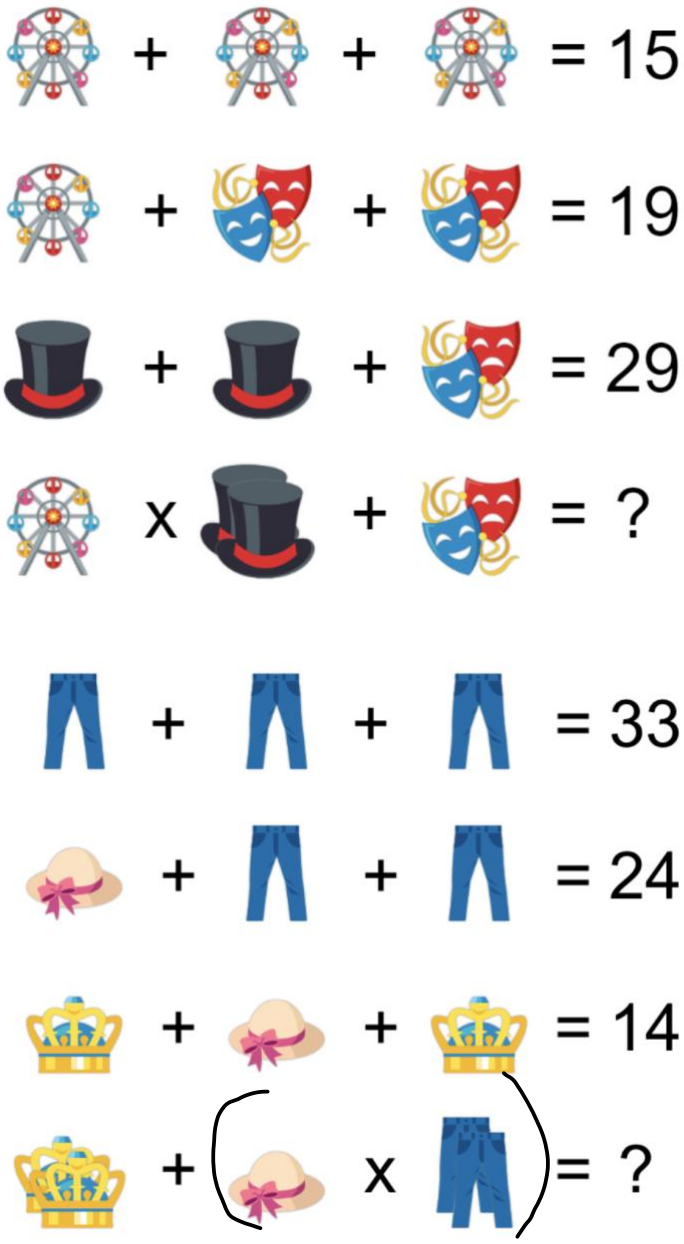
Figure This! Helix and Polygon both used the same number of identical concrete pieces to make their patios. The area of each patio is the same: 180 square meters. What are the dimensions of a single piece of concrete?

Hint: Notice how the pieces fit together on Polygon's patio. What is different about the way the pieces fit on Helix's patio?

Area is an important mathematical concept. Architects, real estate agents, artists, and surveyors all use area in their work.

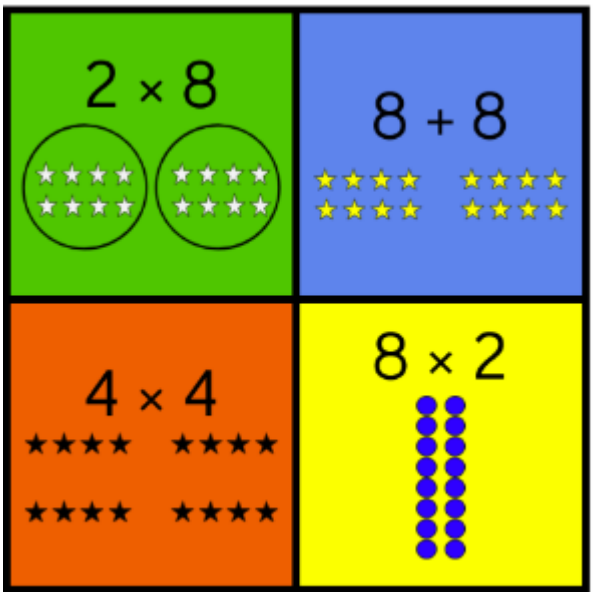
Day 4 Task

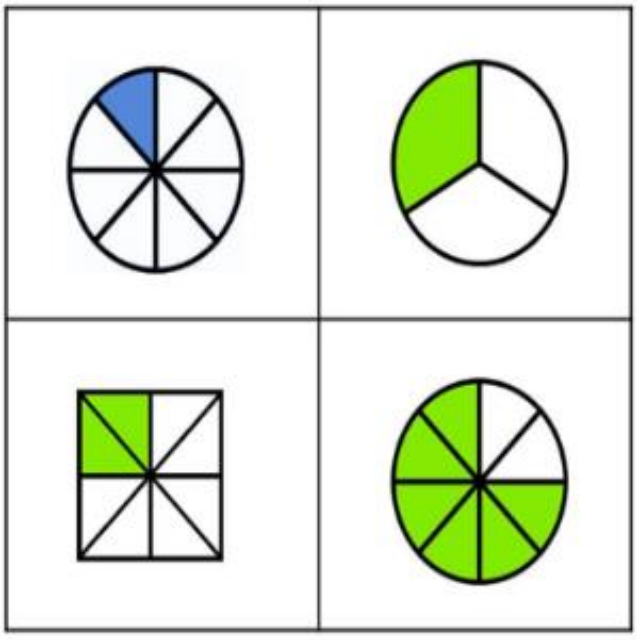
Analyze each puzzle and determine what each picture stands for. Record the new equations with numbers and solve the last one. (NOTE: Be careful! The last line in each is tricky!! Watch for parenthesis and the operation signs. Also take a close look at the pants in the last row of the first picture and the black hat in the second picture in the last row. How is it different than the other pants and black hats above it?



Day 5 Task

Below are 4 different Which One Doesn't Belong puzzles. Examine each one and explain why each box may not belong and why like the example above.





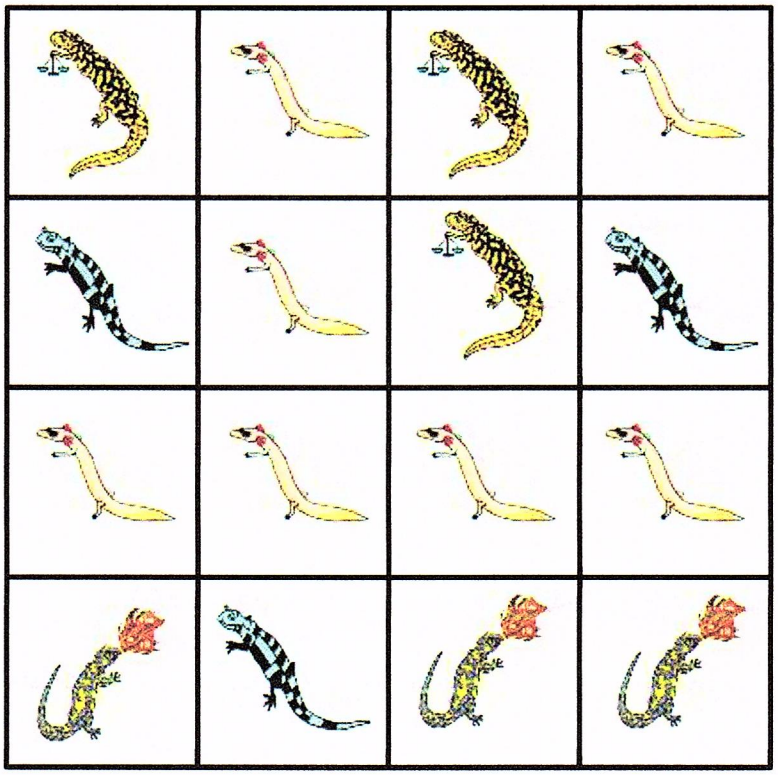
CHALLENGE: Create your own "Which One Doesn't Belong" using items from home!

Name Date

CAPTAIN'S SQUARE PUZZLE 3

Each salamander is worth a different value between 1 and 5.

The total of each horizontal line of salamanders is worked out for you.



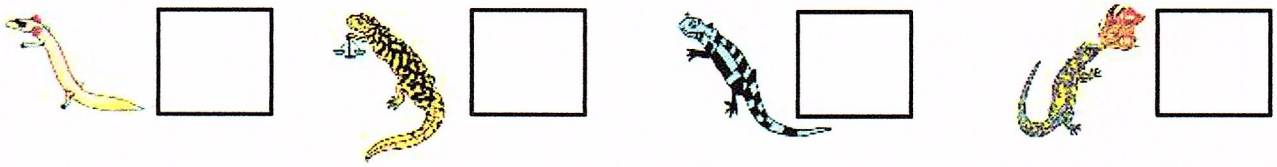
= 10

= 13

= 12

= 19

How much is each salamander worth?

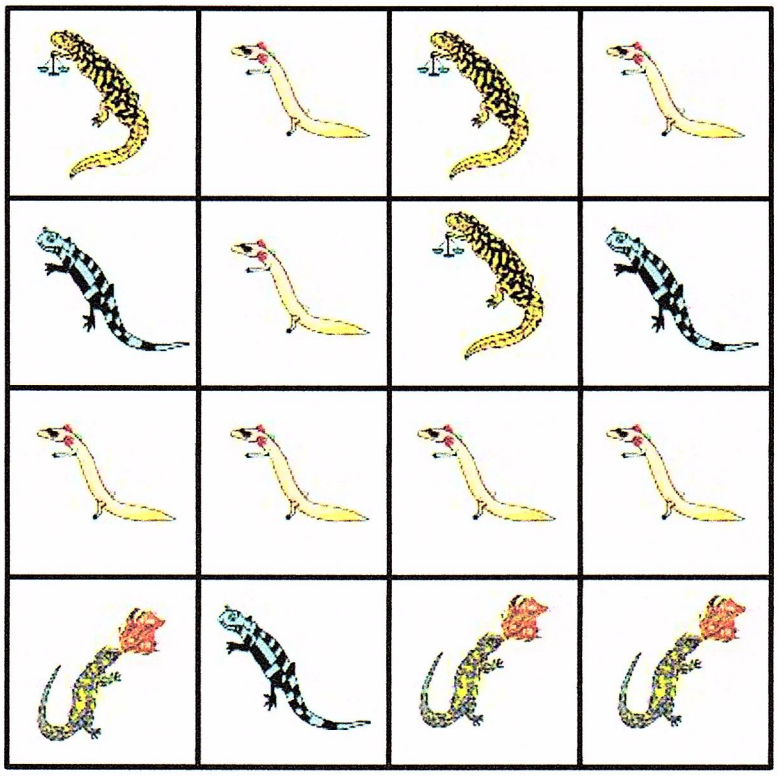


Name Date

CAPTAIN'S SQUARE PUZZLE 3 ANSWERS

Each salamander is worth a different value between 1 and 5.

The total of each horizontal line of salamanders is worked out for you.



= 10

= 13

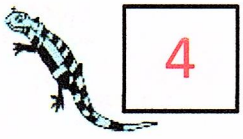
= 12

= 19

How much is each salamander worth?

 3

 2

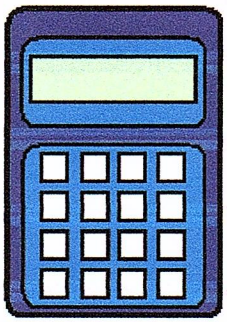
 4

 5

Name Date

BROKEN CALCULATOR PROBLEM 2

Captain's calculator has broken.

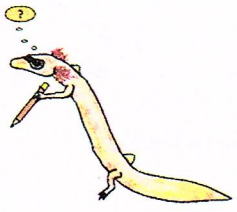


Unfortunately, none of the buttons work apart from the 3, 5, +, - and = button.

Can you help the Captain make all the numbers from 1 to 20 using his broken calculator?

Example: he can make 11 using 3 + 3 + 5 = 11.

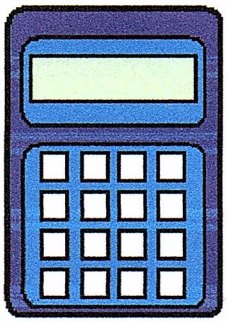
= 1	3 + 3 + 5 = 11
= 2	= 12
= 3	= 13
= 4	= 14
= 5	= 15
= 6	= 16
= 7	= 17
= 8	= 18
= 9	= 19
= 10	= 20



Name Date

BROKEN CALCULATOR PROBLEM 2 ANSWERS

Captain's calculator has broken.



Unfortunately, none of the buttons work apart from the 3, 5, +, - and = button.

You can make any of the numbers from 1 to 20 in a variety of ways. There is an example of how to make each number below.

One interesting point is that you can make the numbers 11 to 20 simply by adding 5 + 5 to all the answers from 1 to 10.

3 + 3 - 5	= 1	3 + 3 + 5	= 11
5 - 3	= 2	3 + 3 + 3 + 3	= 12
3	= 3	5 + 5 + 3	= 13
3 + 3 + 3 - 5	= 4	3 + 3 + 3 + 5	= 14
5	= 5	5 + 5 + 5	= 15
3 + 3	= 6	5 + 5 + 3 + 3	= 16
5 + 5 – 3	= 7	5 + 5 + 5 + 5 – 3	= 17
5 + 3	= 8	5 + 5 + 5 + 3	= 18
3 + 3 + 3	= 9	5 + 5 + 3 + 3 + 3	= 19
5 + 5	= 10	5 + 5 + 5 + 5	= 20