

4

Complete the number patterns:

a) _____, _____, 290, 285, _____, _____

b) 486, 488, _____, _____

c) _____, 123, 223, _____, 423

5

Fill in the missed numbers in the brackets:

a) $643 = (\quad) + (\quad) + (\quad)$

b) $300 + 30 + 3 = (\quad)$

c) $302 = (\quad) + (\quad) + (\quad)$

d) $900 + 0 + 9 = (\quad)$

6

On Monday, Scott had 14 quarters in his piggy bank. On Tuesday, he had 17 quarters. On Wednesday, he had 20 quarters in his piggy bank. If the pattern continues, how many quarters will Scott have in his piggy bank on Tuesday of the next week?

7

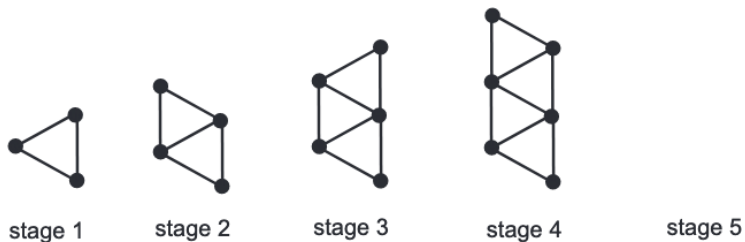
a) Imagine that you have 5 cards, and each card has a different number on it. If the cards only have odd numbers, what computations must you do to get an even result?

b) If the cards only have even numbers, is it possible to get an odd result? What computations must you do to get an odd result? Hint: Consider all 4 types of calculations you know (addition, subtraction, multiplication and division).

8.

The shapes below are made with toothpicks and gumdrops. For example, stage 2 has 5 toothpicks and 4 gumdrops.

a) Look at the pattern and then draw stage 5. For later stages, make a drawing if it helps you answer the questions.



b) How many toothpicks are there at stage 5?

c) How many gumdrops are there at stage 5?

d) Complete the table to show the number of toothpicks and gumdrops for stages 1 through 8.

stage	1	2	3	4	5	6	7	8
number of toothpicks		5						
number of gumdrops		4						

14

Calculate and write down the answer with a remainder where needed:

$300 \div 3 =$

$300 \div 4 =$

$300 \div 5 =$

$300 \div 6 =$

15

Solve the following equations and check your answers:

$800 + x \div 6 = 786$

$(4 \times x) \div 10 = 280$

$b \times 18 + 312 = 402$



16

Simplify fractions (reduce fractions to the lowest terms):

$\frac{6}{8} = \frac{\square}{\square}$

$\frac{24}{32} = \frac{\square}{\square}$

$\frac{27}{9} = \frac{\square}{\square}$

$\frac{4}{8} = \frac{\square}{\square}$

$\frac{5}{15} = \frac{\square}{\square}$

$\frac{14}{21} = \frac{\square}{\square}$

$\frac{8}{32} = \frac{\square}{\square}$

$\frac{60}{90} = \frac{\square}{\square}$

$\frac{8}{16} = \frac{\square}{\square}$

$\frac{30}{50} = \frac{\square}{\square}$

$\frac{7}{28} = \frac{\square}{\square}$

$\frac{3}{9} = \frac{\square}{\square}$

17

Use { } to list the elements of the sets A, B, and C and their intersections according to a Venn Diagram for these sets.

A =

B =

C =

$A \cap B =$

$A \cap C =$

$B \cap C =$

