

**Mini-math Gr 4: Monday, September 21, 2020**

- (1) What is the sum of 254 and 388?
- (2) What is the product of 25 and 11?
- (3) Approximately how much do I weigh in kg?
- (4) Estimate  $4920 + 8201$
- (5) Estimate  $61901 \div 7$
- (6) Draw a picture representing two and three quarters.
- (7) If I have one and a half cups and add it to two and three quarters cups, how many cups do I have?
- (8) Alice had \$20.00 and bought some food which cost \$7.82. About how much change should she receive?

**Mini-math Gr 4: Monday, September 28, 2020**

- (1) What is the sum of 783 and 898?
- (2) What is the product of 12 and 75?
- (3) Approximately how much does a level 5 workbook weigh in g?
- (4) What is two-thirds of five-quarters?
- (5) How many quarters are in six-fifths?

**Mini-math Gr 4: Wednesday, September 30, 2020**

- (1) What is the difference of two-fifths and one-sixth?
- (2) What is the product of  $\frac{4}{5}$  and  $\frac{15}{8}$ ?
- (3) Estimate  $28190 \div 7.1$
- (4) Three oranges plus a basket weighs 970 g. The empty basket is 100 g. How much is one orange?

**Mini-math Gr 4: Monday, October 5, 2020**

- (1) Alice has 129 marbles. Bob has 234 more marbles than Alice. How many marbles does Bob have?
- (2) Alice has 129 marbles. Bob has 234 marbles. How many more marbles does Bob have than Alice?
- (3) Estimate  $(358.8 \times 2 - 348) \div 7$
- (4) Four oranges plus a basket weighs 1253 g. Two oranges plus a basket weighs 684 g. How much is one orange?

**Mini-math Gr 4: Wednesday, October 14, 2020 (8 minutes)**

- (1) Alice has ₹200 and buys an igrushka which is ₹78. How many ₹ does she have left?
- (2) Bob places 32 kembangs so that they are touching. If each kembang is 15 sikhil wide, how many sikhil long is the line?
- (3) Cindy input  $(519.1 \times 3 - 429.3 \times 2) \div (30 - 13)$  into her calculator and got 10.29. Is her answer reasonable? Why or why not?
- (4) Dave wants to solve the following shape algebra problem:

$$7 \blacksquare + 5 \blacktriangle = 160$$

$$8 \blacksquare + 6 \blacktriangle = 191$$

What steps should he take in solving it? (You do not need to solve it!)

## Mini-math Gr 4: Monday, October 19, 2020 (6 minutes)

- (1) Alice has \$15.72 of change and wants to buy some drinks which are \$1.99 each. How many drinks can she buy?
- (2) Half of Bob's money is the same as a third of Cindy's money. What is the ratio of Bob's money to Cindy's money?
- (3) Dave has a pumpkin that is nearly a perfect fit for his square box which has a 30 cm side length. He would like to place a ribbon around the widest part of the pumpkin. If he needs 35 cm to tie a bow as well, about how much ribbon does he need?

**Mini-math Gr 4: Monday, October 26, 2020 (6 minutes)**

- (1) Alice is preparing bags of goodies for her friends as a Halloween treat. She would like to give each of her friends 12 candies, and has 16 friends should would like to give a bag to. If the candy she wants to buy comes in packs of 10, how many packs of candy does she need to buy?
- (2)  $\frac{1}{2}$  of Bob's money is equal to  $\frac{1}{3}$  of Cindy's money is equal to  $\frac{1}{5}$  of Dave's money. Find the ratio of Bob's money to Cindy's money to Dave's money.
- (3) Erica and Felix have 400 g of cotton candy. After Erica gives  $\frac{1}{9}$  of her cotton candy to Felix, they have the same amount of cotton candy. How much more cotton candy did Erica start with than Felix?

**Mini-math Gr 4: Monday, November 2, 2020 (10 minutes)**

- (1) Alice scored 85, 92, 89, 95, and 88 points on her five tests. What was her average score, to the nearest point?

- (2) Order the following decimals from least to greatest:

1.234, 1.25, 1.09, 1.23

- (3)  $\frac{4}{5}$  of Bob's money is equal to  $\frac{3}{11}$  of Cindy's money is equal to  $\frac{6}{7}$  of Dave's money. Find the ratio of Bob's money to Cindy's money to Dave's money.

- (4) Erica went shopping and spent \$22.50 on a shirt. She used  $\frac{1}{4}$  of her remaining money to buy a bag. She was then left with  $\frac{1}{3}$  of her initial amount of money. How much money did she have at first?



Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, November 16, 2020 (5 minutes)**

Each question is worth 2 marks: 1 for the work and 1 for the answer.

- (1) The base of an aquarium measures 70 cm by 60 cm. If you pour  $84,000 \text{ cm}^3$  of water into the aquarium, what will be the depth of the water ?
  
  
  
  
  
  
  
  
  
  
- (2) Apples cost \$1 each and oranges \$1.25 each. You buy four apples and three oranges and you pay with a \$10 bill. How much change does the seller give back to you?
  
  
  
  
  
  
  
  
  
  
- (3) The ratio of girls to boys at a party is 2 : 3. When five boys leave, the ratio of girls to boys becomes 4 : 5. How many girls were at the party?

Name: \_\_\_\_\_

Mark: \_\_\_\_\_

Mini-math Gr 4: Monday, November 23, 2020 (10 minutes)

Each question is worth 2 marks: 1 for the work and 1 for the answer.

- (1) The ratio of girls to boys at a party is  $2 : 3$ . When eight boys leave and eight girls arrive, the ratio of girls to boys becomes  $4 : 5$ . How many girls were at the party at the end?
- (2) Erica went shopping and spent \$45 on a shirt. She used  $\frac{1}{6}$  of her remaining money to buy a bag. She was then left with  $\frac{25}{32}$  of her initial amount of money. How much money did she have at first?

Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, December 7, 2020 (10 minutes)**

Each question is worth 2 marks: 1 for the work and 1 for the answer.

- (1) The ratio of girls to boys at a party is  $4 : 3$ . When 15 girls arrive, the ratio of girls to boys becomes  $7 : 4$ . How many people were at the party at the end?

- (2) Solve for  $x$  and  $y$ :

$$x + y = 5$$

$$x - y = 28$$

Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, December 14, 2020 (10 minutes)**

Each question is worth 2 marks: 1 for the work and 1 for the answer. **Calculators allowed!**

- (1) Alice has an extensive library of books, but has not finished reading all of them. The ratio of unfinished books to finished books is 12 : 19. A week later, Alice has finished 24 books. The new ratio of unfinished books to finished books is then 54 : 101. How many books are in her library?

- (2) Solve for  $x$  and  $y$ :

$$2x + y = 5$$

$$x - 2y = 28$$

Write your answers in the form of (improper) fractions.

Mark: \_\_\_\_\_

Each question is worth 5 marks: 4 for the work (including presentation) and 1 for the answer.

- 13

Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, January 18, 2021 (15 minutes)**

Each question is worth 5 marks: 4 for the work (including presentation) and 1 for the answer.

**Calculators allowed!**

- (1) Alice bought a total of 9.8 kg of apples, some of which cost \$2.80/kg and some of which cost \$3.15/kg. Alice paid with a \$50 note and received \$21.09 in change. To the nearest gram, how many grams of the more expensive apples did she buy?

- (2) A 1-litre beaker contained  $713 \text{ cm}^3$  of water. When 8 identical metal cubes were placed in it,  $492 \text{ cm}^3$  of water overflowed. What was the length of each side of each metal cube in cm, to the nearest hundredth of a cm? ( $1 \text{ L} = 1000 \text{ cm}^3$ )

Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, January 25, 2021 (15 minutes)**

For each question, 1 mark is for the answer and the rest is for the work (including presentation).

**Calculators allowed!**

- (1) (5 marks) Penny has 46 coins in her piggy bank, all of which are either quarters or dimes. If Penny has \$8.65 in total, how many quarters does she have?

- (2) (3 marks) Evaluate the following for  $x = 2021$ :

$$(3(3x + 8) + 26 + x)/10 - x$$

Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, February 1, 2021 (15 minutes)**

For each question, 1 mark is for the answer and the rest is for the work (including presentation).

**Calculators allowed!**

- (1) (2 marks) Simplify the following as much as possible

$$3(2x + 3) - 2(x - 1)$$

- (2) (5 marks) Penny had some nickels, dimes, and quarters in her bag. The number of nickels was  $\frac{1}{3}$  the number of quarters. The number of dimes was  $\frac{1}{2}$  the number of quarters. After spending all of her dimes and  $\frac{2}{3}$  of her quarters, she had \$3.60 left in her bag. How much money did she spend altogether?



Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, February 8, 2021 (15 minutes)**

For each question, 1 mark is for the answer and the rest is for the work (including presentation).

**Calculators allowed!**

- (1) (2 marks) Find out what the following mathemagic trick gives (show your steps in the table):

Step 1) Pick a natural number (1, 2, 3, ...) from 1 to 2021.	
Step 2) Add 17.	
Step 3) Multiply by 3.	
Step 4) Add 9.	
Step 5) Add your original number.	
Step 6) Divide by 4.	
Step 7) Subtract your original number.	

- (2) (5 marks) Bill and Penny had \$119 together. After giving Penny \$16, the ratio of Bill's money to Penny's money is 11:6. How much money did Bill have at first?

Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, March 1, 2021 (15 minutes)**

For each question, 1 mark is for the answer and the rest is for the work (including presentation).

**Calculators allowed!**

- (1) (5 marks)  $\frac{2}{7}$  of the number of marbles in box A is equal to  $\frac{1}{8}$  of the number of marbles in box B. The number of marbles in box C is 75% of the number of marbles in box B. There are 108 more marbles in box B than in box A. How many marbles are in all three boxes combined?

- (2) (2 marks)

Which number doesn't belong, and why? You should be able to explain what the other three numbers have in common.

9, 16, 25, 37

Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, March 8, 2021 (15 minutes)**

For each question, 1 mark is for the answer and the rest is for the work (including presentation).

**Calculators allowed!**

(1) The radius of a circle is 30 cm. You may use  $\pi \approx 3.1416$ .

(a) (1 mark) What is its circumference, to the nearest 0.1 cm?

(b) (1 mark) What is its area, to the nearest 0.1 cm<sup>2</sup>?

(2) (3 marks) A \$100 item decreased in price by 50% one week. The following week, the price increased by 50%. What was its final price?

(3) (5 marks) A 3-digit number has the following properties: the hundreds digit is larger than 3 but less than 8, the tens digit is a composite number, and the ones digit is a prime number. How many such 3-digit numbers are there?

Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, March 22, 2021 (15 minutes)**

For each question, 1 mark is for the answer and the rest is for the work (including presentation).

**Calculators allowed!**

(1) (3 marks) If  $n\%$  of 4 kilometers is 180 meters, then how many meters is  $4\%$  of  $n$  kilometers?

(2) (5 marks) How many three-digit numbers satisfy the property that the middle digit is the average of the first and the last digits?

Name: \_\_\_\_\_

Mark: \_\_\_\_\_

**Mini-math Gr 4: Monday, May 10, 2021 (15 minutes)**

**Calculators allowed!**

- (1) I met someone recently who said they will turn  $n$  years old in the year  $n^2$ . In what year were they born?