5 Four students in Ms. Haswell's class simplify the expression below.

$$6 + 21 \div 7 - 4 \times 2 + 5$$

The first step of each of the four students is shown in the table below.

Simplifying the Expression

	77
Student	First Step
Zoe	6 + 21
Liam	7 – 4
Dennis	21 ÷ 7
Deborah	2 + 5

Which student performs a first step that is correct?

- A Zoe
- B Liam
- C Dennis
- D Deborah
- 4 Germaine buys one hamburger, one sandwich and two fruit salads.

Menu

Item	Amount
Hamburger	\$3.50
Sandwich	\$2.75
Fruit Salad	\$1.60
Frozen Yogourt	\$3.00

How much change should she receive from \$20.00?

- a \$9.15
- b \$9.45
- c \$10.55
- d \$12.15

5 Which number, when placed in the box, makes the following number sentence true?

$$15 - 6 \times 2 + 18 \div 3 = \square$$

- a 7
- b 9
- c 12
- d 24

Cary needs to set up 144 chairs in rows. Each row must have an equal number of chairs. Which of the following could be the method Cary uses to set up the chairs?

- a 14 rows of 10 chairs
- b 12 rows of 14 chairs
- c 6 rows of 21 chairs
- d 8 rows of 18 chairs

Which of the following is a factor of 70 but is not a prime number?

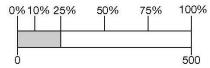
- a 10
- b 7
- c 4
- d 2

6 The weather report shows that there is an 80% chance of rain tomorrow. Which fraction represents this chance?

- $F = \frac{1}{2}$
- $G = \frac{3}{2}$
- H -
- \int_{6}^{5}

A school has 500 students. The shaded portion below shows the students with perfect attendance.

Perfect Attendance



Which of the following is closest to the number of students with perfect attendance?

- **A** 100
- **B** 200
- C 300
- **D** 400
- Which set is in order from least to greatest?
 - a 1.153, 1.062, 0.13, 0.054
 - b 0.13, 0.054, 1.162, 1.153
 - c 0.054, 0.13, 1.153, 1.062
 - d 0.054, 0.13, 1.062, 1.153
- What number is modelled in the place-value chart below?

Thousands	Hundreds	Tens	0nes	Tenths	Hundredths	Thousandths
00	000		0000		0	000

- F 3529.035
- G 3529.35
- H 3511.035
- J 35 011.35

- The results of a survey show that 30% of the people surveyed read a newspaper regularly. Which of the following numbers is equivalent to 30%?
 - a 0.03
 - b 3.0
 - c $\frac{1}{3}$
 - d $\frac{3}{10}$
- Some students were asked in a survey, "What is your favourite sport?" The graph below shows the results of the survey.

Favourite Sport

Favourite Sport	Number of Students		
Hockey	⊕ ⊕ €		
Basketball	$\odot \odot \odot$		
Volleyball	0000		
Soccer	0 0		
Other Sports	₩ (1		

	Key
0	represents 4 students

What percent of the students chose hockey as their favourite sport?

- A 2.5%
- **B** 10%
- C 20%
- D 25%

- A teacher plants 6 tulips and 9 roses in a planter. Which of the following represents the ratio of roses to tulips?
 - a $\frac{3}{2}$
 - $\frac{2}{3}$
 - c <u>15</u>
 - d <u>9</u>
- 1 Which is the correct way to write the number 90 090 in words?
 - a nine hundred ninety
 - b nine thousand ninety
 - c ninety thousand ninety
 - d nine hundred thousand ninety
- 2 Joseph finishes a swim race in 73.365 seconds. Joseph knows the following about his friend's time for the same race.
 - The digit in the hundredths column is 3 more than Joseph's.
 - The digit in the ones column is 2 less than Joseph's.

In what time does Joseph's friend swim the race?

- a 53.368
- **b** 53.395
- c 71.368
- **d** 71.395

The table below shows the number of pop cans four classes collect. It also shows the number of days each class collects during the recycling program.

Class	Pop Cans Collected	Days Collected
Class 1	7284	40
Class 2	1250	25
Class 3	3742	20
Class 4	2705	50

Which class collects the greatest number of pop cans per day?

- F Class 1
- G Class 2
- H Class 3
- J Class 4

A swim team completes the 4-person relay in 210.625 seconds. The times for the first three swimmers are shown below.

Swimmers' Times

Swimmer	Time (in seconds)
1	53.452
2	59.371
3	47.582
4	?

What is the time for swimmer 4?

- a 50.220 seconds
- **b** 50.200 seconds
- c 50.022 seconds
- **d** 50.020 seconds

- Natasha is 12 years old. Her teacher is 36 years old. Which ratio represents Natasha's age in 4 years to her teacher's age in 4 years?
 - **a** 1:3
 - b 2:5
 - c 3:10
 - d 4:9
- 31 Look at the expression below.

$$6-2\times 6\div 2$$

Which of the following shows the order of operations that can be used to simplify this expression correctly?

- a subtraction, division, multiplication
- b subtraction, multiplication, division
- c division, subtraction, multiplication
- d multiplication, division, subtraction
- 2 Chandra, Brittany, Ben and Daniel buy different sandwiches and salads for lunch. Their choices are shown below.

Prices for Lunch

	Salad	Sandwich
Chandra	\$4.48	\$3.99
Brittany	\$4.48	\$4.99
Ben	\$3.49	\$4.99
Daniel	\$3.49	\$3.99

Which person should receive about \$2.50 change from \$10.00?

- a Chandra
- **b** Brittany
- c Ben
- d Daniel

- Mrs. Evans has 30 students in her class. The class has about 75% girls. What is the **best** estimate of the number of boys in Mrs. Evans's class?
 - a 3
 - **b** 8
 - **c** 15
 - d 23
- 1 Which of the following lists shows these numbers in order from least to greatest?

- a 0.125, 12.50, 1.250, 125.0
- **b** 125.0, 12.50, 1.250, 0.125
- c 12.50, 125.0, 0.125, 1.250
- d 0.125, 1.250, 12.50, 125.0
- It takes Nadeem 22 minutes to walk 1 kilometre. At this rate, approximately how long will it take Nadeem to walk 5 kilometres?
 - a 1 hour
 - b 2 hours
 - c 100 hours
 - d 110 hours
- 32 Which expression is equivalent to $128 \div 2$?
 - a $(120 \div 2) + (8 \div 2)$
 - **b** $(120 \div 2) \div (8 \div 2)$
 - c (120+2)+(8+2)
 - d $(120 + 2) \div (8 + 2)$

Mathematics

Grade 6, Spring 2008

Josie, Christina, Audrey and Manny go shopping. Josie spends $\frac{4}{5}$ of her money, Christina spends 75% of her money, Audrey spends 0.68 of her money and Manny spends $\frac{17}{20}$ of his money.

Who has the largest percentage of their money left?

Justify your answer.		

NS&N 6 Mathematics

Each of 130 students sign up for one of five activities. The table below shows some of the results.

Activity Sign-Up

Activity	Number of Students
Soccer	38
Chess	13
Band	33
Drama	
Photography	14

Susan estimates that 25% of the students signed up for drama. Jessica estimates that 50% of the students signed up for drama.

Using the benchmarks of 10%, 25%, 50%, 75% or 100%, justify which estimate is more appropriate.

i		

Write the following fractions in order from least to greatest.

$$\frac{3}{2}$$
, $\frac{2}{3}$, $\frac{1}{4}$, $\frac{4}{5}$

Explain your thinking.	
I Explain your thinking	
Explain your making.	



- A school needs to buy 2400 pencils. The prices for pencils at 3 stores are shown below.
 - · Store A sells 60 pencils for \$1.80.
 - · Store B sells 30 pencils for \$0.99.
 - · Store C sells 15 pencils for \$0.55.

The school will purchase the pencils with the lowest price. Which store has the lowest price for 2400 pencils?

İ	Explain your answer.		
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ĺ	Store has the lowest price for pencils.		

cans of paint are needed.

NS&N 6

The rectangular ceiling of a room has an area of 36 m². The ceiling needs 3 coats of paint.

Each can of paint covers 25 m².

About how many cans of paint are needed to paint the ceiling?

Explain your thinking.

NS&N 6 Mathematics

Pie is served at a picnic. Each pie is made up of 6 equal pieces. Bradley records the number of pieces each person eats in the table below.

Name	Gurleen	Max	Ta-Shanya	Stewart	Brianne	Adrian
Number of Pieces Eaten	3	2	2	3	3	1

How many pies are eaten in total? Express your answer as a fraction.

Show your work.		
They eat	pies.	

Grade 6, Spring 2009 Mathematics

Show your work.			
,			

NS&N 6 Mathematics

Consider the fractions $\frac{3}{2}$ and $1\frac{3}{4}$.

· Which of these fractions is larger?

Justify your answer.

The larger fraction is ______.

• Find a fraction between $\frac{3}{2}$ and $1\frac{3}{4}$.

Justify your answer.

A fraction between $\frac{3}{2}$ and $1\frac{3}{4}$ is ______.