## Number Operations

5. What is the product of 68.39 and 6 ?
(A) 368.84
(B) 3688.4
(C) 410.34
(D) 4103.4
6. What is 4.83 divided by 7 ?
(A) 6.9
(B) 0.69
(C) 69.0
(D) 0.069
7. Calculate: $0 . 3 \longdiv { 5 . 4 3 }$
(A) 1.80
(B) 1.81
(C) 18.1
(D) 181.0
8. Here is a flyer from your favourite store.


If you bought 4 CDs , what would be the total cost on a tax-free day?
(A) $\$ 40.68$
(B) $\$ 43.88$
(C) $\$ 60.68$
(D) $\$ 63.88$
9. If you had $\$ 25.00$ left and you then bought a hat and a poster, how much change would you get?
(A) $\$ 3.18$
(B) $\$ 4.18$
(C) $\$ 4.82$
(D) $\$ 21.82$
10. Which model represents $\frac{1}{4}+\frac{1}{2}$ ?
(A)

(B)

(C)

(D)

11. If the function machine has an input of 12 and an output of 3 , what could the function be?

(A) $\times 3+2$
(B) $\div 3-2$
(C) $\times 2+3$
(D) $\div 2-3$
12. Which expression has the same answer as $2.47 \div 0.1$ ?
(A) $2.47 \times 0.1$
(B) $2.47 \times 1.0$
(C) $2.47 \times 10$
(D) $2.47 \times 100$
13. Which is a square number?
(A) 24
(B) 25
(C) 44
(D) 45
14. If both the length and width of this rectangle are doubled, how will the area of the newly formed rectangle change?
(A) The area will be four times as large.
(B) The area will be half as large.
(C) The area will double.

(D) The area will not change.
15. Sam brings 168 treats to the Welcome Back party. She gives 4 treats to the teacher and keeps 4 treats for herself. If the treats are shared equally among the remaining 20 students, how many treats will each student get?
(A) 8
(B) 41
(C) 80
(D) 84

1. Here is the recipe for a fruit salad which will serve 4 people:

> 4 apples
> 3 oranges
> 500 mL yogurt
> 250 mg granola
> 35 grapes

Change the recipe to serve 36 people.

| New Recipe for Fruit Salad |  |
| :---: | :---: |
| Amount | Ingredients |
|  | apples |
|  | oranges |
|  | yogurt |
|  | granola |
|  | grapes |

2. Circle the operations you used to change the recipe: addition subtraction multiplication division
3. Explain why you chose or did not choose two of these operations.
4. Share the 2 granola bars equally among the 3 students. Colour each share a different colour and draw an arrow from each share to the student who gets that share.

5. What fraction of 1 bar will Sarah get?
6. What fraction of the 2 bars will Sarah get?
7. Do the two fractions represent the same amount for Sarah? Use words, numbers, or pictures to explain your answer.

## Shape and Space

26. What is the measure of the missing angle?
(A) $50^{\circ}$
(B) $80^{\circ}$
(C) $100^{\circ}$
(D) $130^{\circ}$

27. Which quadrilateral has opposite angles that are congruent?

(B)

(C)

(D)

28. Which shape has diagonals that are perpendicular to each other?
(A)

(B)

(C)

(D)

29. How many metres is 52 centimetres?
(A) 0.52
(B) 5.20
(C) 520
(D) 5200
30. What is the area of the combined shapes?
(A) $18 \mathrm{~cm}^{2}$
(B) $30 \mathrm{~cm}^{2}$
(C) $36 \mathrm{~cm}^{2}$
(D) $42 \mathrm{~cm}^{2}$

31. What is the area of the parallelogram?

(A) $13 \mathrm{~cm}^{2}$
(B) $15 \mathrm{~cm}^{2}$
(C) $30 \mathrm{~cm}^{2}$
(D) $50 \mathrm{~cm}^{2}$
32. Use your protractor to measure this angle.

33. What name is given to the type of angle you just measured?
34. Using a ruler and a protractor, draw an angle that measures $35^{\circ}$.
$\square$
35. Draw a reflected image of Triangle A across the mirror line. Label the new triangle $B$.

36. On the same dot paper, translate Triangle B three units right and four units down. Label this new triangle C .

## 6. How many centimetre cubes can fit inside this container?



## Number Concepts

32. Which fraction means the same as 0.4 ?
(A) $\frac{0}{4}$
(B) $\frac{1}{4}$
(C) $\frac{2}{5}$
(D) $\frac{10}{4}$
33. In golf, the lowest score wins. Which is the winning score?
(A) 0
(B) -2
(C) -3
(D) 5
34. Which pair of numbers have the greatest common factor of 4 ?
(A) 2 and 4
(B) 2 and 8
(C) 12 and 16
(D) 12 and 24
35. A flea has a mass of 2 thousandths of a gram. Which decimal represents this mass?
(A) 0.0002
(B) 0.002
(C) 200.0
(D) 2000.0
36. Abby and Joey had 5 puppies, 3 of which were males. Which represents the ratio of female puppies to the total?
(A) $2: 3$
(B) $2: 5$
(C) $3: 5$
(D) $5: 2$
37. Which colour marble represents the mode?
(A) blue
(B) green
(C) red
(D) yellow

38. For the 20 marbles in the bag, the probability of choosing a certain colour marble is $\frac{1}{4}$. What colour is the marble?
(A) blue
(B) green
(C) red
(D) yellow

39. If you want to find out how many minutes a day the average grade six student spends using the computer, which group would you survey?
(A) grade six basketball team
(B) grade six choir
(C) grade six drama club
(D) grade six homeroom class
40. Which point represents the coordinates $(2,-2)$ ?
(A) P
(B) Q
(C) R
(D) S

41. These pictures of hieroglyphics would be found in books of ancient Egypt. What is the ratio of birds to snakes?

(A) 6:9
(B) $6: 15$
(C) $9: 6$
(D) $9: 15$
42. Which shows the number of snakes as a fraction of the total?
(A) $\frac{1}{3}$
(B) $\frac{2}{3}$
(C) $\frac{2}{15}$
(D) $\frac{3}{5}$
43. Write these fractions and decimals on the number line.

$$
\begin{array}{lllll}
\frac{7}{3} & 2.05 & 2 \frac{2}{3} & 2.50 & \frac{11}{4}
\end{array}
$$

2. Explain how you arranged these numbers on the number line.

| Number | How I decided to place this number. |
| :--- | :--- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

3. Sarah said $0.049>0.3$ because 49 is more than 3 . Do you think Sarah is correct? Explain your thinking.
4. Numbers can be sorted in a variety of ways. For example, the numbers 100, 20, 200, and 36 all have 4 as a factor. Use the chart to sort some of these numbers in two other ways. You need four numbers in each group.

| 100 | 20 | 13 | 50 | 4 |
| :---: | :---: | :---: | :---: | :---: |
| 5 | 500 | 9 | 17 | 25 |
| 200 | 21 | 36 | 7 | 15 |


| Group 1 |  |
| :--- | :---: |
| 1. |  |
| 2. |  |
| 3. |  |
| 4. |  |
| Sorting Rule |  |
|  |  |
|  |  |
|  |  |


| Group 2 |  |
| :--- | :---: |
| 1. |  |
| 2. |  |
| 3. |  |
| 4. |  |
| Sorting Rule |  |
|  |  |
|  |  |
|  |  |

5. What is one way sorting numbers can help you when you are either in school or not in school?

## Mental Math

## Set 1:

1. What is 42 divided by 7 ?
2. What is an equivalent fraction for $\frac{2}{4}$ ?
3. If you give the clerk $\$ 2.05$ and a burger costs $\$ 1.85$, how much change will you get?
4. About how much is $39 \times 41$ ? (Ask: How did you figure this out?)
5. About how much is $4.1 \times 5.2$ ? (Ask: How did you figure this out?)
6. You have 85 cents and one balloon costs 20 cents, how many balloons can you buy? (Ask: How did you figure this out?)

Set 2:

1. What is 56 divided by 8 ?
2. What is an equivalent fraction for $\frac{3}{6}$ ?
3. If you have $\$ 1.00$ and a juice costs 65 cents, how much change will you get?
4. About how much is $29 \times 52$ ? (Ask: How did you figure this out?)
5. About how much is $3.7 \times 1.9$ ? (Ask: How did you figure this out?)
6. You have 95 cents and a pencil costs 30 cents, how many pencils can you buy? (Ask: How did you figure this out?)
7. What is 48 divided by 6 ?
8. What is an equivalent fraction for $\frac{4}{8}$ ?
9. If you give the clerk $\$ 2.10$ and a snack costs $\$ 1.75$, how much change will you get?
10. About how much is $59 \times 22$ ? (Ask: How did you figure this out?)
11. About how much is $4.1 \times 5.2$ ? (Ask: How did you figure this out?)
12. You have 90 cents and an eraser costs 25 cents, how many erasers can you buy? (Ask: How did you figure this out?)
