## Number Operations

- 1. What is the product of 5.263 and 3?
  - (A) 15.689
    (B) 15.789
    (C) 156.89
    (D) 157.89
- 2. What is 9.66 divided by 7?
  - (A) 0.138
    (B) 1.38
    (C) 13.8
    (D) 138.0
- 3. Calculate:

(A) 0.0411
(B) 0.411
(C) 4.11
(D) 41.1

4. The number 8 was put in the function machine below. The output was 8. What is the function?



(A)  $\div 2 + 4$ (B)  $\times 2 + 1$ (C)  $\div 2 + 3$ (D)  $\times 2 - 7$ 

5. A bottle of water costs \$1.79. How much would it cost to purchase 6 bottles of water?

(A) \$6.24
(B) \$6.74
(C) \$10.74
(D) \$10.80

6. Calculate.

- 69.9 ÷ 0.3 (A) 0.23 (B) 2.33 (C) 23.3 (D) 233
- 7. Which shaded regions represent  $\frac{1}{3} + \frac{1}{2}$ ?



8. Which is equivalent to  $1.23 \times 10?$ 

(A) 1.23 ÷ 0.001
(B) 1.23 ÷ 0.01
(C) 1.23 ÷ 0.1
(D) 1.23 ÷ 1

9. Lisa purchased 2 containers of orange juice, 1 milk and 2 bottles of water. What was the total cost of her drinks?

(A) \$5.10
(B) \$6.65
(C) \$6.95
(D) \$7.95

Water ..... \$ 1.39 Apple ····· <sup>\$</sup>1.55 Juice Orange ..... \* **1.46** Juice Milk ..... \$2.25

10. Calculate.

## 1.92 × 1.4

- (A) 0.960
- (B) 2.688
- (C) 9.600
- (D) 26.88

1. The table shows the prices of items at a music store on Tax-Free Day.

Items	Cost
CD	\$12.25
MP3 Player	\$23.95
DVD	\$22.75
Headphones	\$9.95

Pat was charged over \$50.00 for a CD, MP3 Player and headphones. How did he **immediately** know the clerk charged the wrong amount?

Explain your answer using words and numbers.

2a) Solve: 0.2 × 0.4 = \_\_\_\_\_

b) Explain the position of the decimal in the product.

3a) Write a story problem you can solve by dividing18.30 by 6.

b) Solve your problem.

4. And rew said the answer to  $1\frac{1}{2} - \frac{1}{3}$  is less than 1.

Is he correct?\_\_\_\_\_

Use words, pictures and numbers to explain your answer.





## Number Concepts

11. The chart shows the area of four countries. Order the countries from least to greatest area.

Country	Area (km²)
Canada	9 984 670
China	9 596 960
Egypt	1 001 450
Russia	17 075 200

least.....greatest

(A) Egypt, Canada, China, Russia

(B) Egypt, China, Canada, Russia

(C) Russia, China, Canada, Egypt

(D) Russia, Canada, China, Egypt

- 12. Which decimal number is the same as 34 750 000?
  - (A) 0.3475 million
    (B) 3.475 million
    (C) 34.75 million
    (D) 347.5 million

- 13. Which number is closest to the fraction  $\frac{16}{3}$ ?
  - (A) 5 (B) 6 (C) 13
  - (D) 14
- 14. The ratio of boys to girls in a choir is 1:5. If there are 5 boys, what is the total number of students in the choir?
  - (A) 10
  - (B) 25
  - (C) 26
  - (D) 30
- 15. In a grade 6 class 75% of the students have brown hair. What is the ratio of brown-haired students to the whole class?
  - (A) 1:75
    (B) 1:4
    (C) 3:4
    (D) 7:5

- 16. What is 40 000 000 + 5 000 000 + 20 000 + 8 000 + 60 in standard form?
  - (A) 45 286
  - (B) 452 860
  - (C) 40 528 060
  - (D) 45 028 060
  - 17. What are two common factors for 12 and 30?
    - (A) 3 and 5
    - (B) 3 and 6
    - (C) 4 and 5
    - (D) 4 and 6

1a) Place each number in the appropriate place on the number line.

$3\frac{3}{4}$ million	5 500 000	$6\frac{1}{4}$ million	4.2 million	
•				
3 000 000			7 000	000

b) Choose two of these numbers and explain how you decided where to place them.

Number	My explanation

2. There are 20 students in a grade 6 class. Six of the students are girls.

a) What is the ratio of girls to boys? \_\_\_\_\_

b) Write an equivalent ratio for your answer in a).

My equivalent ratio: \_\_\_\_\_

Use words, pictures and numbers to explain why these two ratios are equivalent.

My explanation:

 Morgan read the number forty-two million three hundred five thousand three. He then recorded it as 42 353.

a) Is he correct? \_\_\_\_\_

b) Explain your answer.



## Shape and Space

- 18. A Grade 6 student grew 29 millimetres (mm) in a year. How many centimetres (cm) did the student grow?
  - (A) 0.29 (B) 2.9 (C) 29 (D) 290
- 19. The area of a whiteboard is 6 square metres (m<sup>2</sup>). What is the area in square centimetres (cm<sup>2</sup>)?
  - (A) 0.0006
    (B) 0.06
    (C) 600
    (D) 60 000
- 20. An elephant has a mass of 6300 kilograms (kg). How many tonnes (t) does it weigh?
  - (A) 0.63
    (B) 6.3
    (C) 630 000
    (D) 6 300 000

21. Which three angles can form a triangle?

(A) 30°, 40°, 120°
(B) 45°, 45°, 90°
(C) 90°, 90°, 60°
(D) 60°, 60°, 70°

- 22. The length of a rectangle is 10 cm. Its area is 50 cm<sup>2</sup>. What is the perimeter of the rectangle?
  - (A) 30 cm
    (B) 40 cm
    (C) 60 cm
    (D) 500 cm
- 23. What is the order of rotational symmetry of this figure?



(A) 2 (B) 3

- (*C*) 4
- (D) 5

24. The volume of a yogurt tube is 145 cm<sup>3</sup>. What is the capacity of the tube in millilitres (mL)?

(A) 1.45
(B) 14.5
(C) 145
(D) 1450

1a) Draw a reflected image of Triangle A across the mirror line. Label the new triangle B.



b) One the same dot paper, translate triangle B two units right and three units down. Label the new triangle C. 2a) Draw an angle which measures 80° using a ruler and a protractor.

b) Use your protractor to measure this angle.

My Answer: \_\_\_\_\_°

3. Draw **two** different quadrilaterals that each have an area of 16 square units.



