## 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:
$6 \longdiv { 2 . 4 6 6 }$
(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.

$$
69.9 \div 0.3
$$

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

(B)

(C)

(D)

8. Which is equivalent to $1.23 \times 10$ ?
(A) $1.23 \div 0.001$
(B) $1.23 \div 0.01$
(C) $1.23 \div 0.1$
(D) $1.23 \div 1$
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) $\$ 7.95$

10. Calculate.

$$
1.92 \times 1.4
$$

(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: $0.2 \times 0.4=$ $\qquad$
b) Explain the position of the decimal in the product.
$\qquad$
$\qquad$
$\qquad$
$\qquad$ ——

3a) Write a story problem you can solve by dividing 18.30 by 6 .
b) Solve your problem.
4. Andrew 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.
$\square$

## Number Concepts

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

| Country | Area (km ${ }^{2}$ ) |
| :---: | :---: |
| Canada | 9984670 |
| China | 9596960 |
| Egypt | 1001450 |
| Russia | 17075200 |

least................greatest
(A) Egypt, Canada, China, Russia
(B) Egypt, China, Canada, Russia
(C) Russia, China, Canada, Egypt
(D) Russia, Canada, China, Egyp $\dagger$
12. Which decimal number is the same as 34750000 ?
(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 $40000000+5000000+20000+8000+60$ in standard form?
(A) 45286
(B) 452860
(C) 40528060
(D) 45028060
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 $5500000 \quad 6 \frac{1}{4}$ million 4.2 million
3000000
b) Choose two of these numbers and explain how you decided where to place them.

| Number | My explanation |
| :---: | :---: |
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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: $\qquad$
Use words, pictures and numbers to explain why these two ratios are equivalent.

3. Morgan read the number forty-two million three hundred five thousand three. He then recorded it as 42353.
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 $\left(m^{2}\right)$. What is the area in square centimetres $\left(\mathrm{cm}^{2}\right)$ ?
(A) 0.0006
(B) 0.06
(C) 600
(D) 60000
20. An elephant has a mass of 6300 kilograms (kg). How many tonnes ( $\dagger$ ) does it weigh?
(A) 0.63
(B) 6.3
(C) 630000
(D) 6300000
21. Which three angles can form a triangle?
(A) $30^{\circ}, 40^{\circ}, 120^{\circ}$
(B) $45^{\circ}, 45^{\circ}, 90^{\circ}$
(C) $90^{\circ}, 90^{\circ}, 60^{\circ}$
(D) $60^{\circ}, 60^{\circ}, 70^{\circ}$
22. The length of a rectangle is 10 cm . Its area is $50 \mathrm{~cm}^{2}$. 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 $145 \mathrm{~cm}^{3}$. 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 $80^{\circ}$ using a ruler and a protractor.
b) Use your protractor to measure this angle.


My Answer: 0
3. Draw two different quadrilaterals that each have an area of 16 square units.

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