

Number Operations

1. If a bottle of water costs \$1.63, how much will it cost to purchase 7 bottles of water?

(A) \$11.21
(B) \$11.41
(C) \$112.21
(D) \$742.21

2. Material for a costume costs \$3.28 a metre. How much will it cost to purchase 2.5 m of material?

(A) \$2.29
(B) \$8.20
(C) \$22.96
(D) \$82.00

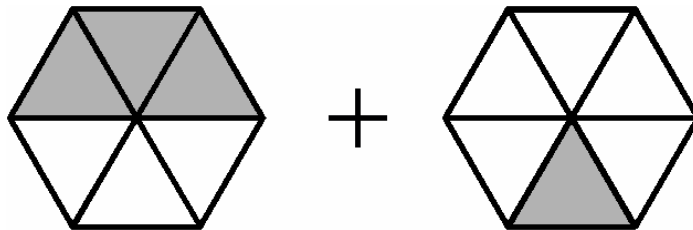
3. Calculate: $4\overline{)2.488}$

(A) 0.622
(B) 0.722
(C) 6.220
(D) 7.220

4. A piece of rope 8.25 m long is cut into 3 equal pieces.
How long is each piece in metres?

- (A) 0.275
- (B) 2.75
- (C) 27.5
- (D) 24.75

5. Calculate.

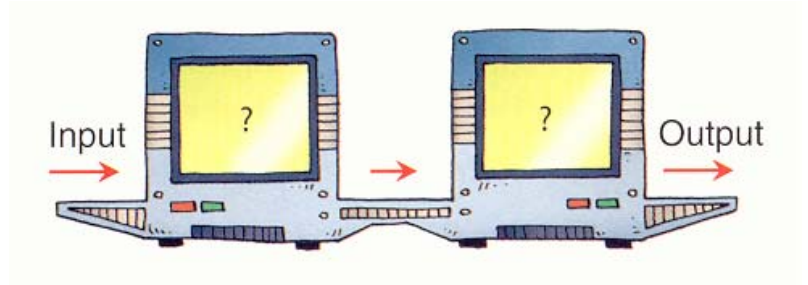


- (A) $\frac{3}{4}$
- (B) $\frac{4}{6}$
- (C) $\frac{2}{6}$
- (D) $\frac{5}{8}$

6. The table shows the input and output from a machine with two operations.

Choose the answer which shows the numbers and the operations of the function machine.

| input | output |
|-------|--------|
| 1 | 1 |
| 2 | 4 |
| 3 | 7 |
| 4 | 10 |

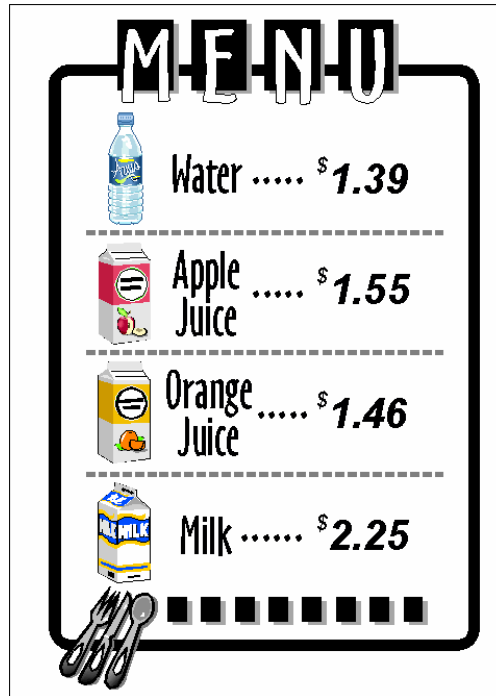


- (A) $\times 1 + 0$
(B) $\times 4 - 4$
(C) $\times 2 - 1$
(D) $\times 3 - 2$
7. There are 16 hockey teams. Each team sold 144 packages of popcorn. How many packages of popcorn were sold in all?

- (A) 1440
(B) 2284
(C) 2304
(D) 2392

8. Ms. Jones purchased 1 bottle of water, 3 containers of apple juice and 2 cartons of milk. What was the total cost of her drinks?

- (A) \$9.54
- (B) \$10.53
- (C) \$10.44
- (D) \$10.54



9. Solve.

$$74.4 \div 0.4$$

- (A) 0.86
- (B) 1.86
- (C) 18.6
- (D) 186


10. Calculate.

$$1.82 \times 1.3$$

- (A) 0.728
- (B) 2.366
- (C) 23.66
- (D) 7.28

1. One kilogram of grapes cost \$4.29. Mary bought 5 kilograms. She was charged \$19.96. How did Mary immediately know that the clerk charged the wrong amount?

Use words, pictures and numbers to explain your answer.



2. Lisa multiplied 0.8×0.3 and her answer was 24.
Is she correct?

Explain your answer.

3. Write a story problem you can solve by dividing 25.25 by 5. Then solve your problem.

4. Luke said the answer to $\frac{2}{6} + \frac{1}{3}$ is less than 1.

Is he correct? _____

Use words, pictures and numbers to explain your answer.

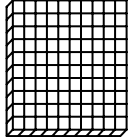
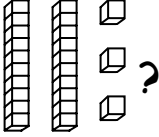


Number Concepts

11. The chart shows the area of five countries from least to greatest. China has an area of $9\,596\,960\text{ km}^2$. If China is added to the table, between which two countries would it be located?

| Country | Area (km^2) |
|---------------|------------------------|
| India | 3 287 590 |
| Australia | 7 686 850 |
| Brazil | 8 511 970 |
| United States | 9 629 090 |
| Canada | 9 984 670 |

- (A) Australia and Brazil
(B) Brazil and United States
(C) India and Australia
(D) United States and Canada
12. What is the decimal number for 68 250 000?
- (A) 0.6825 million
(B) 6.825 million
(C) 68.25 million
(D) 682.5 million

13.  = 1. What is the value of  ?

- (A) 0.023
 - (B) 0.23
 - (C) 2.3
 - (D) 23
14. Mr. Gagnon has 25 students in his grade six class. If there are 14 boys, what is the ratio of boys to girls?
- (A) 11 : 14
 - (B) 14 : 11
 - (C) 14 : 25
 - (D) 25 : 14
15. What is an equivalent ratio for 18 : 63?
- (A) 2 : 7
 - (B) 2 : 9
 - (C) 3 : 7
 - (D) 3 : 9

16. What is $60\,000\,000 + 8\,000\,000 + 40\,000 + 6\,000 + 70$ in standard form?

- (A) 68 467
- (B) 684 670
- (C) 60 846 070
- (D) 68 046 070

17. Which number is between 41 million and 41.5 million?

- (A) 41 499
- (B) 41 999
- (C) 41 023 999
- (D) 41 500 999

1a.) Write each number on the number line.

2 500 000

$4\frac{3}{4}$ million

$2\frac{1}{4}$ million

3.7 million



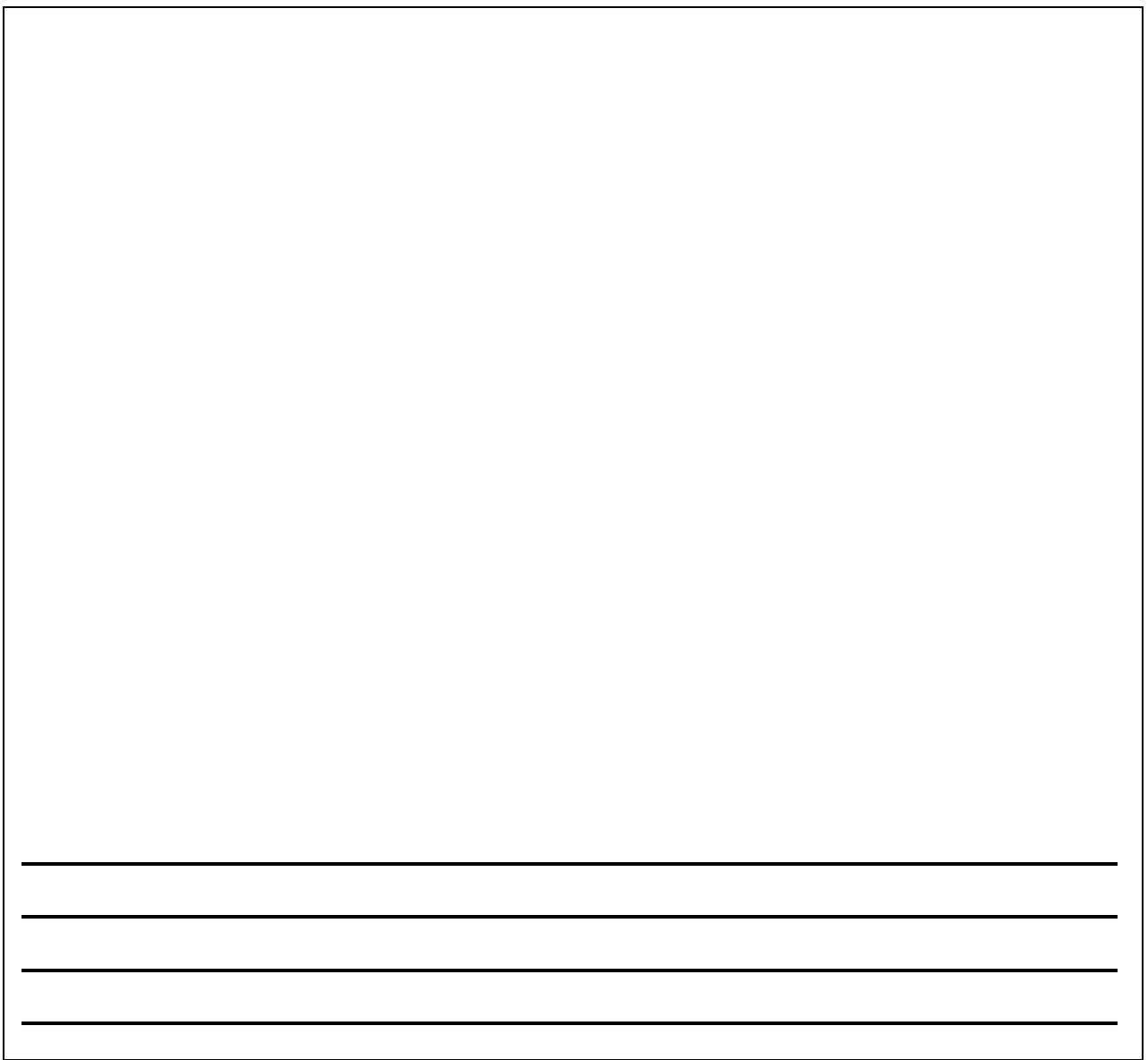
b.) Choose two of these numbers and explain how you decided where to place them.

| Number | My explanation |
|--------|---|
| | <hr/> <hr/> <hr/> <hr/> <hr/> |
| | <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> |

2. There are 24 students in Ms. Lebrun's grade 6 class. Ten of the students are boys. Jenna says that the ratio of boys to girls is 5 : 7.

a.) Is she correct? _____

b.) Use words, pictures and numbers to explain your answer.



3. Simon read the number sixty-eight million forty-two thousand three. He then recorded it as 68 423.

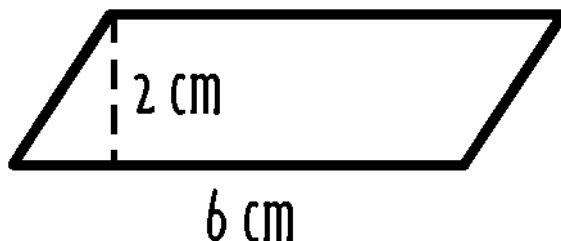
a.) Is he correct? _____

b.) Use words, pictures and numbers to explain your answer.



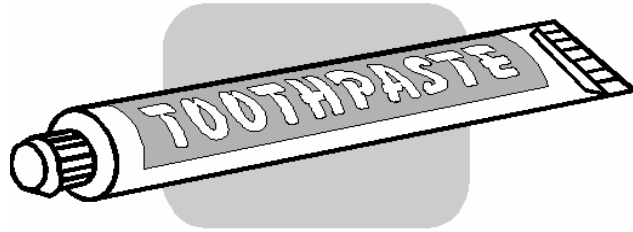
Shape and Space

18. A Grade 6 student grows about 2.7cm a year. How many millimetres is this?
- (A) 0.027
(B) 0.27
(C) 27
(D) 270
19. The African elephant has a mass of 6.5 tonnes. How many kilograms does it weigh?
- (A) 0.0065
(B) 0.065
(C) 650
(D) 6500
20. The base of the parallelogram is 6cm. The height is 2cm. What is the area of the shaded region in square centimetres (cm^2)?



- (A) 4
(B) 6
(C) 8
(D) 12

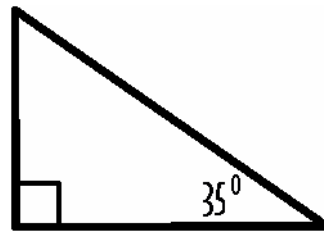
21. The capacity of this tube of toothpaste is 135mL. What is the volume of this tube in cm^3 ?



- (A) 1.35
- (B) 13.5
- (C) 135
- (D) 1350

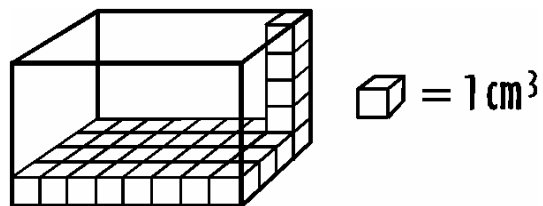
22. What is the measure of the missing angle?

- (A) 35°
- (B) 55°
- (C) 65°
- (D) 90°

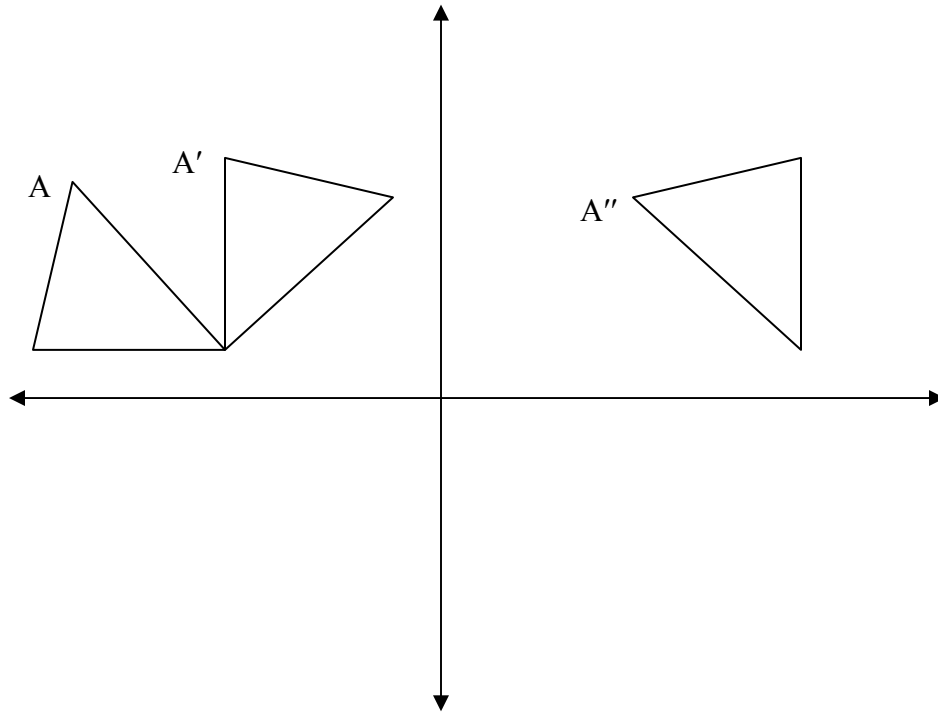


23. What is the volume of the rectangular prism in cm^3 ?

- (A) 17
- (B) 32
- (C) 60
- (D) 160



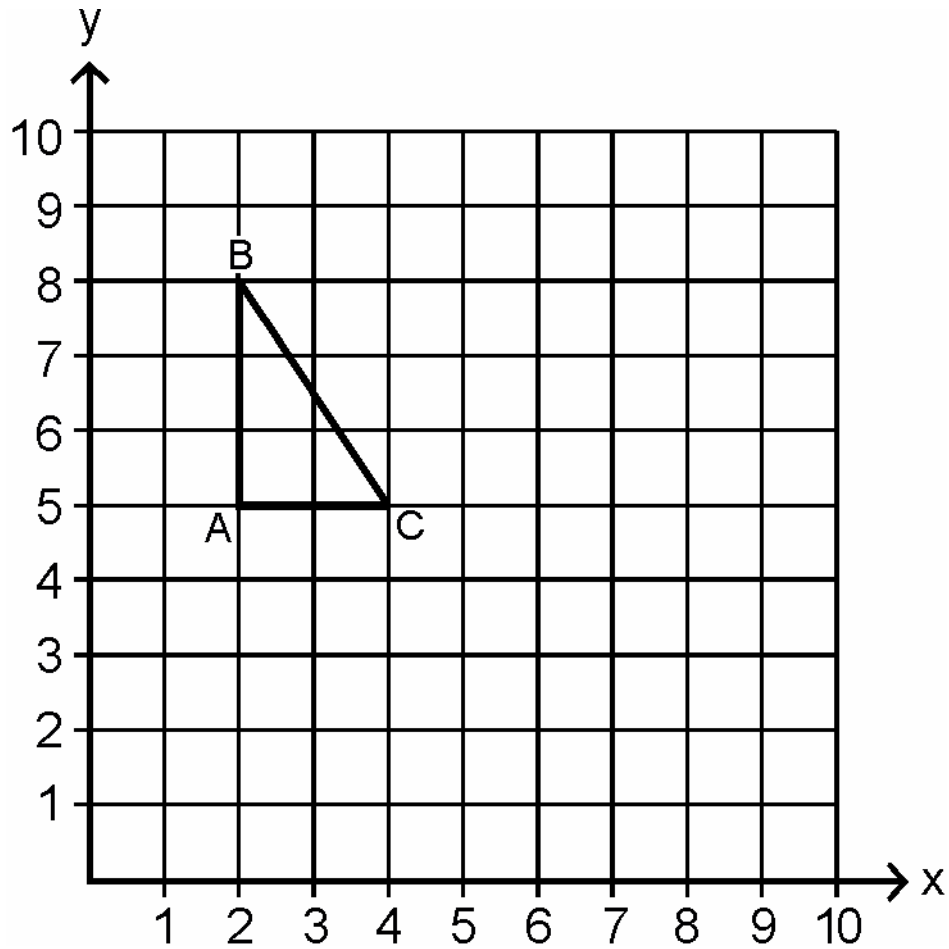
24. Which transformations have occurred?



- (A) rotation, reflection
- (B) translation, rotation
- (C) reflection, rotation
- (D) translation, reflection

1a.) Rotate $\triangle ABC$ clockwise 90° about C and draw the rotation image. Label the vertices $A' B' C'$.

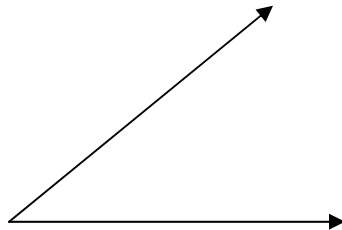
b.) Translate $\triangle A' B' C'$ 3 units right and 2 units down. Label this triangle $A'' B'' C''$.



2a.) Using a ruler and protractor, draw an angle that measures 105° .

b.) What name is given to the type of angle you have drawn?

c.) Use your protractor to measure this angle?



d.) What name is given to the type of angle you have measured?

3. Draw two different rectangles that each have an area of 18 square units.

