

4. Express each of the following as a decimal number.

(a) $5 + \frac{6}{10} + \frac{4}{1000}$

(b) $\frac{104}{1000}$

[2]

(c) $3\frac{3}{8}$

(d) $\frac{4}{25}$

[2]

5. Solve.

(a) $26.45 + 29.73$

(b) $4.83 + 0.6$

[2]

(c) $2.3 - 0.37$

(d) $40 - 0.08$

[2]

(e) 23.73×7

(f) 4×49.08

[4]

6. Give the answer correct to 1 decimal place.

(a) $42.3 \div 3$

(b) $68 \div 7$

[4]

(c) $68.31 \div 8$

(d) $174.5 \div 6$

[4]

(e) $45 \div 4$

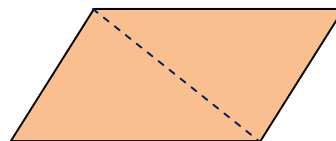
(f) $230 \div 7$

[4]

7. A painter mixed 12.5 quarts of white paint with 16.7 quarts of green paint. He poured the mixture equally into 4 cans. He used one can to paint a wall. How many quarts of paint did he have left?

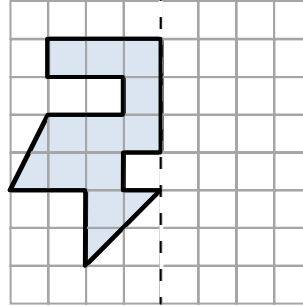
[3]

8. Is the dashed line a line of symmetry?



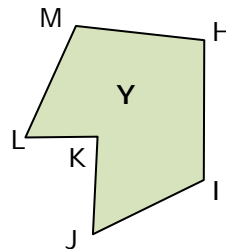
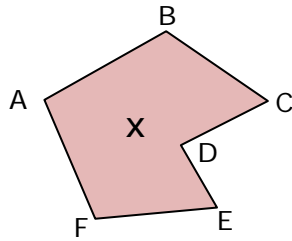
[1]

9. Complete the symmetric figure with the dotted line as the line of symmetry.



[1]

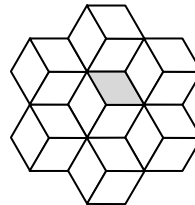
10. The two figures X and Y shown here are congruent.



- (a) Which vertex of figure Y corresponds to vertex B of figure X? _____ [1]
- (a) Which side of figure X corresponds to side LM of figure Y? _____ [1]

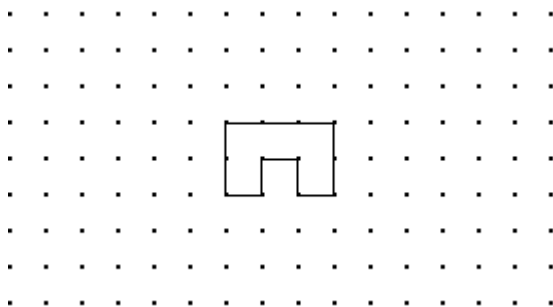
11. Which of the three types of triangles, scalene, isosceles, or equilateral, have rotational symmetry? [1]

12. The drawing shown at the right is an example of a tessellation using congruent shapes of a rhombus.

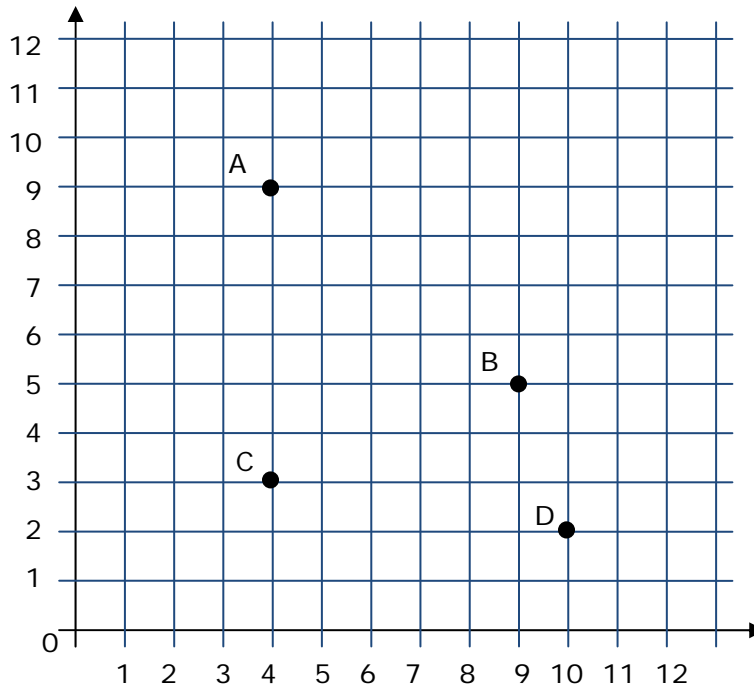


[1]

Use the shape given below to make a tessellation in the space provided.



13.



(a) Write the ordered pair for each of the points. [2]

A: _____ B: _____

C: _____ D: _____

(b) Draw a point at $(6, 10)$. [1]

(c) Which coordinates, the first or the second, of the ordered pairs do you subtract to find the distance between A and C? [1]

14. Josh wants to put a fence around a rectangular garden. The length of the garden is 3 times its width.

(a) If L stands for the length and W for the width, write a formula for the length of the garden. [1]

$L =$

(b) If the width of the garden is 3 yards, what length of fencing does he have to buy to surround the garden? [1]

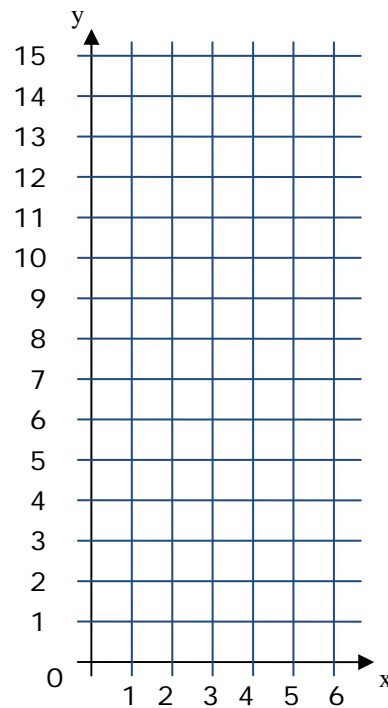
15. A rectangle has coordinates (4, 3), (4, 10), (10, 10), and (10, 3) on a grid with 1 centimeter squares. What is area of the rectangle? [2]

16. Answer the following questions based on the equation $y = 2x + 1$

- (a) Complete the table [2]

x	1	2	3	4
y				

- (b) Graph the values for the equation $y = 2x + 1$ as ordered pairs (x, y) . Connect the points and extend the line. Use the graph to find the value of x when y is 13.

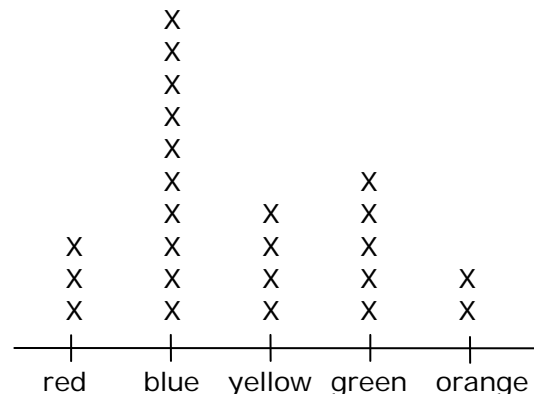


17. Valerie recorded the weights of the dogs that were brought to the veterinarian clinic. [2]

Weight in lb	40	15	8	45	38	26	54	60	18
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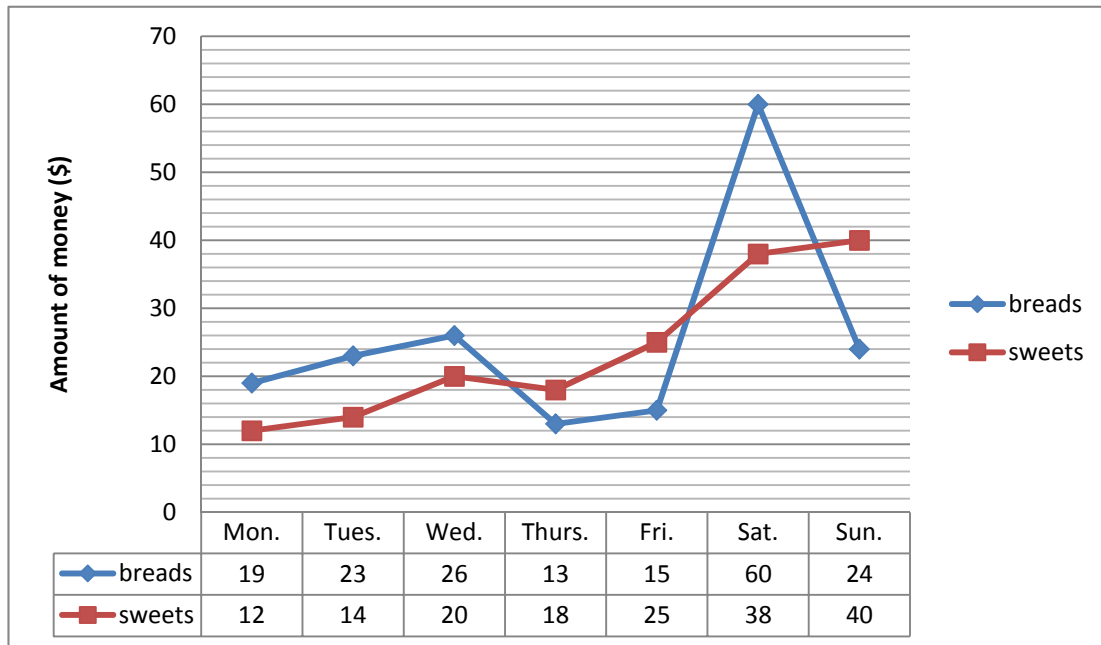
What is the median weight? _____

18. Red, blue, yellow, green, and orange counting discs were put into a bag. Students were asked to pick out one disc without looking, record the color, and then put the disc back in the bag. The results were recorded on a line plot.



- (a) What is the mode of this data? _____ [1]
- (b) How many times was a disc picked? _____ [1]
- (c) What fraction of the time was blue picked? _____ [1]
- (d) Which color was picked $\frac{1}{6}$ of the time? _____ [1]

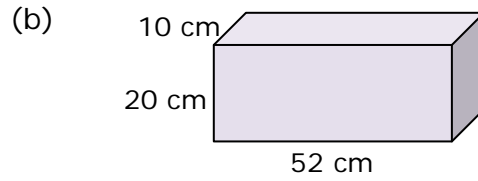
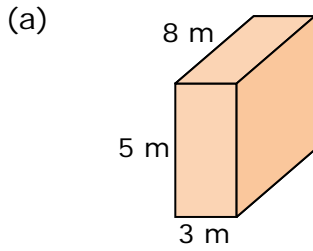
19. The line graph shows the amount of money collected from a bake sale at the community center. Home-made breads and sweets such as cookies and cupcakes were sold.



- (a) What was more popular overall, breads or sweets? _____ [1]
- (b) How much more total money was collected on Sat. than on Thurs? [1]

- (c) Which was the best day of the week for the bake sale? _____ [1]
- (d) Express the amount of money collected for breads on Saturday as a fraction of the total amount of money collected for breads. [2]

20. Find the volume of each rectangular prism.



[4]

21. Multiply or divide in compound units.

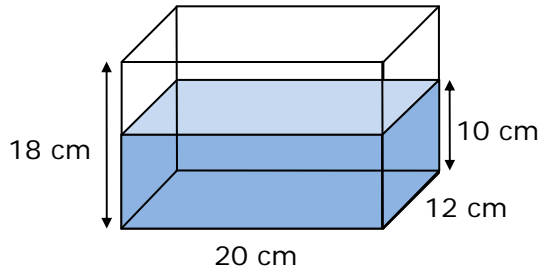
(a) $4 \text{ m } 65 \text{ cm} \times 5 = \underline{\hspace{2cm}} \text{ m } \underline{\hspace{2cm}} \text{ cm}$ [2]

(b) $5 \text{ h } 30 \text{ min} \div 3 = \underline{\hspace{2cm}} \text{ h } \underline{\hspace{2cm}} \text{ min}$ [2]

(c) $5 \text{ yd } 2 \text{ ft.} \times 6 = \underline{\hspace{2cm}} \text{ yd } \underline{\hspace{2cm}} \text{ ft}$ [2]

(d) $11 \text{ qt } 2 \text{ c} \div 2 = \underline{\hspace{2cm}} \text{ qt } \underline{\hspace{2cm}} \text{ c}$ [2]

22. A rectangular tank 20 cm long, 12 cm wide and 18 cm high is filled with water to a depth of 10 cm.



- (a) Find the volume of water in liters and milliliters (1 liter = 1000 cm³). [2]
Give your answer in liters and milliliters.
- (b) How many liters more water are needed to fill the tank? Give your answer in liters. [2]
23. A meter of lace cost \$0.40. Mrs. Jacobs bought 5.5 m of lace. She used 1.3 m to make a dress. She used the rest to make 4 cushions of the same kind.
- (a) How much change did she receive if she paid for the lace with \$10? [2]
- (b) How much lace did she use for each cushion? Give your answer in meters and centimeters. [2]

24. John works 7 h 15 min in a factory 5 days a week. He is paid \$8 an hour. [3]
How much money does he earn a week?

25. A box with four books weighs 6 kg 272 g. The box alone weighs 500 g. [3]
Find the weight of one book. Express your answer in kilograms and grams.

26. 0.3 of all the apples a grocer had were sold. If he had 49 apples left, how [3]
many apples did he have at first?

27. Marissa tossed a coin 2 times and recorded whether she got heads or tails [2]
each time. How many possible outcomes are there?

Answer Key

1. A: -1 B: 0.5 C: 1.1 D: 2.45

2. (a) 0.004 0.4 4.04 4.4

(b) $\frac{3}{5}$ 0.602 $\frac{5}{8}$ 0.66

3. (a) $\frac{3}{5}$ (b) $4\frac{3}{25}$

(c) $\frac{51}{125}$ (d) $6\frac{1}{500}$

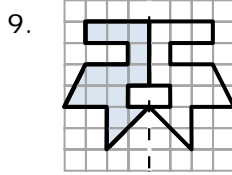
4. (a) 5.604 (b) 0.104
(c) 3.375 (d) 0.16

5. (a) 56.18 (b) 5.43
(c) 1.93 (d) 39.92
(e) 166.11 (f) 196.32

6. (a) 14.1 (b) 9.7
(c) 8.5 (d) 29.1
(e) 11.3 (f) 32.9

7. 21.9 quarts

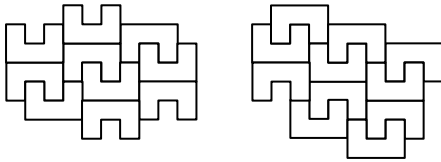
8. no



10. (a) I (b) FE

11. Equilateral

12. Answers will vary.



13. (a) A: (4, 9) B: (9, 5)
C: (4, 3) D: (10, 2)
(b) Check placement of point.
(c) second

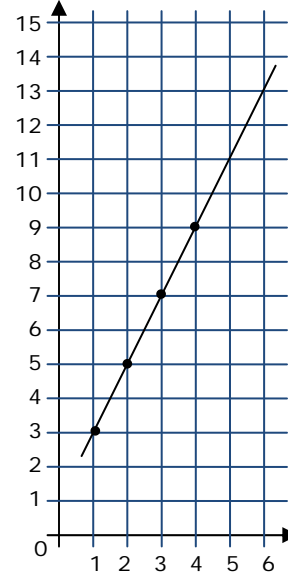
14. (a) $L = 3 \times W$
(b) 24 yards

15. 42 cm²

16. (a)

x	1	2	3	4
y	3	5	7	9

(b) $x = 6$



17. 38

18. (a) blue (b) 24
(c) $\frac{5}{12}$ (d) yellow

19. (a) breads (b) \$67
(c) Sat. (d) $\frac{1}{3}$

20. (a) 120 m³ (b) 10,400 cm³

21. (a) 23 m 25 cm (b) 1 h 50 min
(c) 34 yd 0 ft (d) 5 qt 3 c

22. (a) 2 L 400 ml (b) 1.92 L

23. (a) \$7.80 (b) 1 m 5 cm

24. \$290

25. 1 kg 443 g

26. 70

27. 4