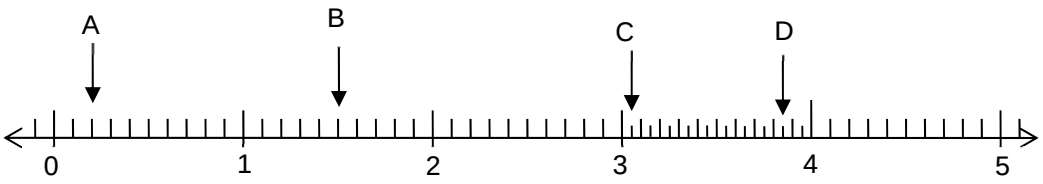
Assessment Test for Singapore Primary Mathematics 4B

This test covers material taught in Primary Mathematics 4B
(http://www.singaporemath.com/)

1. Write the whole or decimal number that each letter represents. [4]



A: _____ B: _____ C: _____ D: _____

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

(a) $\frac{16}{10}$ (b) $4+\frac{8}{100}$ [2]

(c) $5+\frac{6}{10}+\frac{4}{1,000}$ (d) $\frac{104}{1,000}$ [2]

(e) $3\frac{3}{4}$ (f) $\frac{4}{25}$ [2]

3. Arrange in increasing order.

(a) 4.04 0.4 4.4 0.004 [2]

(b) $\frac{5}{8}$ 0.602 $\frac{3}{5}$ 0.66 [2]

4. Express each decimal number as a fraction or mixed number in its simplest form.

(a) 0.6 (b) 4.12 [2]

(c) 0.408 (d) 6.002 [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 x 7 (f) 4 x 49.08 [4]

6. Give the answer correct to 1 decimal place.

(a) 42.3 ÷ 3 (b) 68 ÷ 7 [4]

(c) 68.31 ÷ 8 (d) 174.5 ÷ 6 [4]

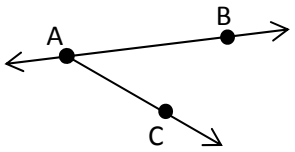
(e) 45 ÷ 4 (f) 230 ÷ 7 [4]

7. Jasmine saved $31.85. Her brother saved $19.65 less than she did. How much money did both of them save? [3]

8. 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 does he have left? [3]

9. 0.3 of all the apples a grocer had were sold. If he had 49 apples left, how many apples did he have at first? [3]

10. Name one of the following geometric constructions in the drawing, using only the labeled points. [4]



Angle: _____

Ray: _____

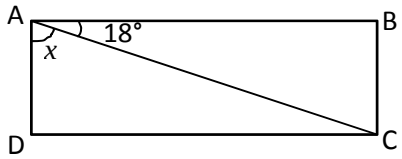
Line: _____

Line segment: _____

11. A $\frac{3}{4}$ turn is _____ right angles and is ____ degrees. [2]

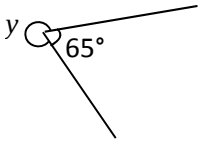
12. Find the measure of the marked unknown angle.

(a) ABCD is a rectangle [2]

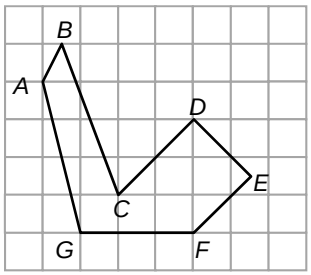


m$\angle x$ = _____

(b) [2]



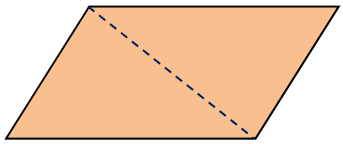
m$\angle y$ = _____

13. 

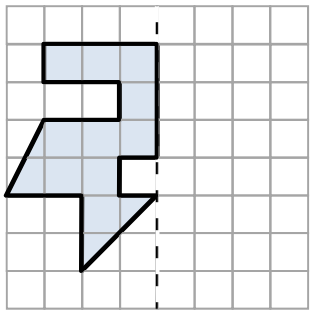
(a) Name a pair of parallel lines. [1]

(b) Name a pair of perpendicular lines. [1]

14. The figure at the right is a parallelogram. Is the dashed line a line of symmetry? [1]



15. Complete the symmetric figure with the dotted line as the line of symmetry. [2]



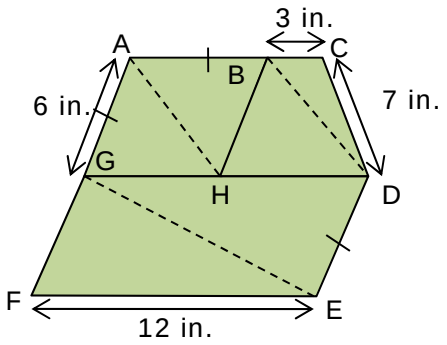
16. Which of the following shapes must also always be a parallelogram? Circle them. [2]

Square	Quadrilateral
Trapezoid	Rhombus
Rectangle	Polygon

17. Which of the following types of triangles have line symmetry? [1]

Scalene Isosceles Equilateral

18. This figure ACDEF is a pentagon and is made up of the three quadrilaterals, ABHG, BCDH, and GDEF. One is a trapezoid but not a parallelogram, and two are parallelograms. GA = AB = DE = 6 in., BC = 3 in., CD = 7 in., EF = 12 in.



(a) Quadrilateral GDEF has _____ right angles, _____ obtuse angles, and _____ acute angles. [2]

(b) Which quadrilateral is a trapezoid but not a parallelogram? [1]

_____

(c) Which quadrilateral is a rhombus? _____. [1]

(d) Lines are drawn from A to H, from G to E, and from B to D, forming triangles. If GE = 14 in, what is the perimeter of triangle GFE? [2]

_____ in.

(e) Which of the triangles are: [2]

Scalene: _____

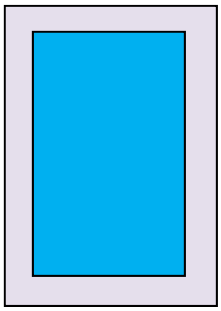
Isosceles: _____

Equilateral: _____

Have one obtuse angle: _____

(f) The perimeter of the figure ACDEF is _____ in. [2]

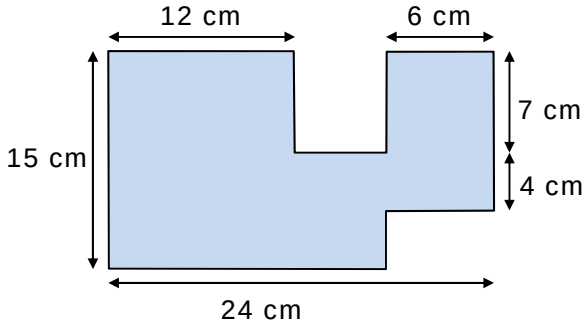
19. A rectangular swimming pool measures 24 m by 16 m.



(a) Find the area of the pool. [2]

(b) A concrete path 2 m wide is paved around the swimming pool. What is the area of the path? [3]

20. In the figure, all lines meet at right angles.



(a) Find the area of the figure. _____ [3]

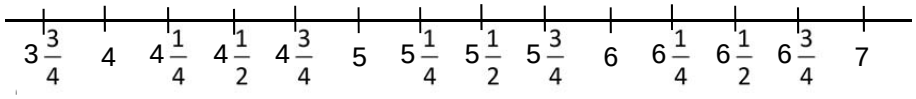
(b) Find the perimeter. _____ [3]

21. Valerie recorded the weights of some mature dogs of a certain small breed that were brought to the veterinarian clinic to the nearest quarter of a pound.

Weight in pounds

$5\frac{1}{4}$	$5\frac{3}{4}$	$3\frac{3}{4}$	$6\frac{1}{4}$	$4\frac{3}{4}$	5	$4\frac{3}{4}$	$5\frac{1}{2}$	$5\frac{1}{2}$	5
$4\frac{1}{4}$	$5\frac{3}{4}$	$6\frac{1}{4}$	$4\frac{1}{2}$	$5\frac{1}{2}$	6	$5\frac{3}{4}$	$4\frac{3}{4}$	$5\frac{1}{2}$	$5\frac{3}{4}$
$5\frac{1}{4}$	$6\frac{1}{2}$	$5\frac{3}{4}$	$6\frac{1}{2}$	6	$4\frac{3}{4}$	$6\frac{1}{4}$	5	$5\frac{3}{4}$	6

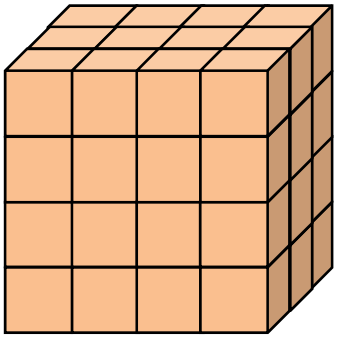
(a) Create a line plot from the data. [3]



(b) What is the most common weight? [1]

(c) What is the difference between the heaviest and lightest weight recorded? [2]

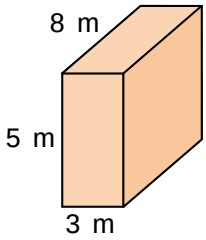
(d) What fraction of the dogs weighed $6\frac{1}{4}$ lb? [2]

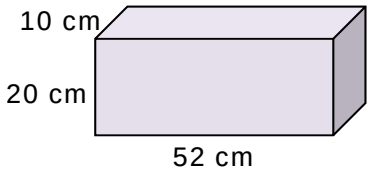
22. 

What is the volume of this solid? [2]

_____ cubic units

23. Find the volume of each rectangular prism.

(a) 

(b) 

[4]

Answer Key

1. A: 0.2 B: 1.5 C: 3.05 D: 3.85

2. (a) 1.6 (b) 4.08
   (c) 5.604 (d) 0.104
   (e) 3.75 (f) 0.16

3. (a) 0.004 0.4 4.04 4.4
   (b) $\frac{3}{5}$ 0.602 $\frac{5}{8}$ 0.66

4. (a) $\frac{3}{5}$ (b) $4\frac{3}{25}$
   (c) $\frac{51}{125}$ (d) $6\frac{1}{500}$

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. $44.05

8. 21.9 quarts

9. 70

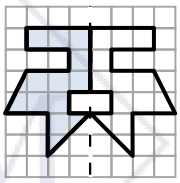
10. Angle: BAC or CAB
    Ray: AB or AC
    Line: AB or BA
    Line segment: Ab, BA, AC, or CA

11. 3; 270°

12. (a) 72°
    (b) 295°

13. (a) CD, EF
    (b) CD, DE

14. no

15. 

16. Square, Rhombus, Rectangle

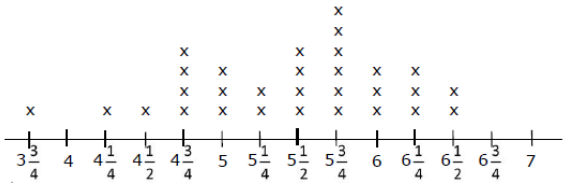
17. Isosceles, Equilateral

18. Note: Students may have a different order of vertices in their answers.
    (a) 0, 2, 2
    (b) BCDH
    (c) ABHG
    (d) 32 in.
    (e) Scalene: BCD, GDE, GEF
    Isosceles: AHG, ABH, BDH
    Equilateral: none
    1 obtuse angle: BCD
    (f) 46

19. (a) 384 m^2
    (b) 176 m^2

20. (a) 294 cm^2
    (b) 92 cm

21. (a)



    (b) $5\frac{3}{4}$ lb

    (c) $2\frac{3}{4}$ lb

    (d) $\frac{1}{10}$

22. 48

23. (a) 120 m^3
    (b) 10,400 cm^3