

# Placement Test for Singapore Primary Mathematics 5B

This test covers material taught in Primary Mathematics 5B

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Starred problems (\*) are for topics only in the US edition.

1. Express each  $8\frac{5}{8}$  as a decimal correct to 2 decimal places. [2]

2. Multiply or divide.  
(a)  $515.02 \times 43$  (b)  $81 \times 1.29$  [4]

(c)  $2.8 \div 400$  (d)  $1421 \div 7000$  [4]

3. Find the equivalent measures.  
(a)  $0.4 \text{ m} = \underline{\hspace{2cm}} \text{ cm}$  (b)  $1.25 \text{ kg} = \underline{\hspace{1cm}} \text{ kg} \underline{\hspace{1cm}} \text{ g}$  [4]

(c)  $305 \text{ ml} = \underline{\hspace{2cm}} \text{ L}$  \*(d)  $0.75 \text{ ft} = \underline{\hspace{2cm}} \text{ in.}$  [4]

\*(e)  $6.25 \text{ lb} = \underline{\hspace{1cm}} \text{ lb} \underline{\hspace{1cm}} \text{ oz}$  \*(f)  $3.25 \text{ gal} = \underline{\hspace{1cm}} \text{ gal} \underline{\hspace{1cm}} \text{ c}$  [4]

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4. Express each as a percentage. [2]  
(a) 0.47

(b)  $\frac{6}{15}$  [2]

(c) 215 out of 500 [2]

5. Express each percentage as a decimal and as a fraction in its simplest form. [3]

(a) 85%      Decimal: \_\_\_\_\_      Fraction: \_\_\_\_\_

(b) 16%      Decimal: \_\_\_\_\_      Fraction: \_\_\_\_\_ [3]

6. Find 32% of \$96. [2]

7. Find the average of 21.4, 18.2, and 65.7. [2]

8. Fill in the blank: The average of 42, 36, \_\_\_\_\_, and 25 is 30. [3]

9. John had \$75. He spent \$15 on a book. What percentage of his money does he have left? [4]

10. The normal price of a camera was \$76. At a sale it was sold at a discount of 15%. What was the selling price of the camera? [4]

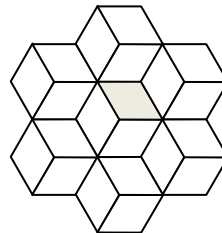
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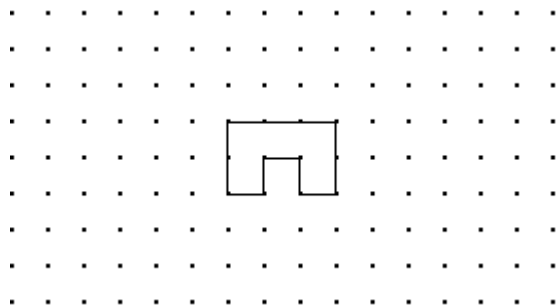
11. The average weight of 3 packages is 2 kg 750 g. The average weight of 2 of them is 3 kg 200 g. Find the weight of the third package. Give your answer in kg and g. [5]

12. In a city, the rate for taxi fare for the first kilometer is \$2.60 and for every additional kilometer it is \$0.80. Find the taxi fare for a journey of 6.5 km. [5]

13. The drawing shown at the right is an example of a tessellation using a rhombus. [2]



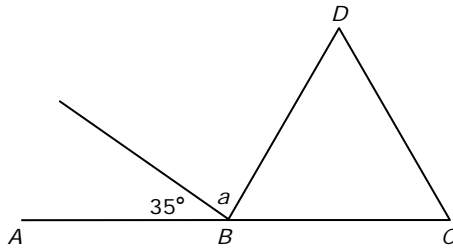
Use the shape given below to make a tessellation in the space provided.



14. The following figures are not drawn to scale. Find the unknown marked angle in each.

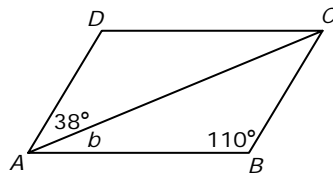
(a) ABC is a straight line. BCD is an equilateral triangle.

[3]



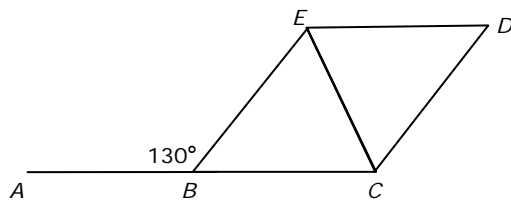
(b) ABCD is a parallelogram.

[3]



(c) ABC is a straight line. BCDE is a rhombus.

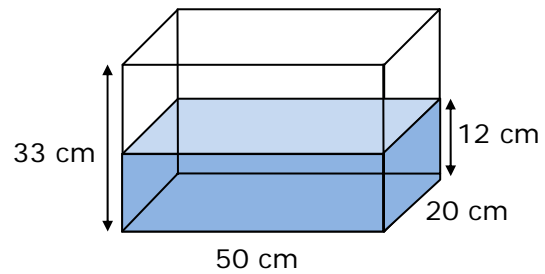
[3]



15. A rectangular tank measures 50 cm by 20 cm by 33 cm. It is to be filled with water from a tap. It takes 2 minutes to fill it to a height of 12 cm.

(a) What is the rate of flow from the tap in liters per minute?

[4]



(b) How many more minutes will it take to fill the tank?

[2]

16. A rectangular container 8 cm long and 9 cm wide was filled with water to a depth of 6 cm. When 12 marbles of equal size were added to the container, the depth of the water became 7.5 cm. Find the volume of one marble.

[5]

17. How many 4-cm cubes can fit into a rectangular box 1 m long, 0.4 m wide, and 0.6 m high? [5]

18. Sam had \$85 and John had \$220. They were each given an equal amount of money. Then John had twice as much money as Sam. How much money did each boy receive? [5]

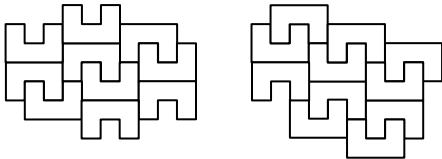
19. Alice has 50% of the amount of money Betty has, and Carrie has  $\frac{2}{5}$  of what Alice has. If Betty has \$364 more than Carrie, how much money does Alice have? [5]

\*20. The length of one side of a cube is 1 ft. What is its volume in cubic inches? [4]

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## Answer Key

1. (a) 8.63
2. (a) 22,145.86      (b) 104.49  
(c) 0.007      (d) 0.203
3. (a) 40 cm      (b) 1 kg 250 g  
(c) 0.305 ml      \* (d) 9 in.  
\* (e) 6 lb 4 oz      \* (f) 3 gal 4 c
4. (a) 47%      (b) 40%      (e) 43%
5. (b)  $0.85, \frac{17}{20}$   
(c)  $0.16, \frac{4}{25}$
6. \$30.72
7. 35.1
8. 17
9. 80%
10. \$64.60
11. 1 kg 850 g
12. \$7
13. Answers will vary. 
14. (a)  $85^\circ$       (b)  $32^\circ$       (c)  $65^\circ$
15. (a) 6 L/min      (b) 3.5 min
16.  $9 \text{ cm}^3$
17. 3,750
18. \$50
19. \$227.50
- \*20. 1728

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