

Assessment Test for Singapore Primary Mathematics 4A Standards Edition

This test covers material taught in Primary Mathematics 4A Standards Edition
(<http://www.singaporemath.com/>)

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| 1. | Consider the number 832,951,076 | |
| (a) | Write the number in words. | [1] |
| (b) | What digit is in the ten thousands place? _____ | [1] |
| (c) | What is the value of the digit 3 in this number? _____ | [1] |
| (d) | $832,951,076 = 951,000 + 76 +$ _____ | [1] |
| (e) | What is the difference in the place values of the digits 2 and 6 in this number? _____ | [1] |
| (f) | What number is 100,000 more than this number? _____ | [1] |
| (g) | What number is 100 less than this number? _____ | [1] |
| (h) | Round the number to the nearest million. _____ | [1] |
| (i) | Find the difference between 832,951,076 and 832,951,075. _____ | [2] |
| | Now find the number that is 2 less than this difference. _____ | |
| 2. | The temperature on the polar plateau of Antarctica can reach as high as 30 degrees Celsius below freezing in mid-December. | [1] |
| | Write this as a negative number. _____ | |
| 3. | Complete the following regular number pattern: | [1] |
| | 20, 15, 10, 5, _____, _____, _____ | |

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|---|--|
| <p>4. Arrange these numbers in increasing order. [1] 12, -7, 0, -12, -2</p> | |
| <p>5. (a) Find all the positive factors of 60. [1] _____</p> <p>(b) Which of these factors are prime numbers? [1] _____</p> | |
| <p>6. Find the positive common factors of 15 and 18. [1] _____</p> | |
| <p>7. Find the positive common multiples of 6 and 9 smaller than the product of 6 and 9. _____ [1]</p> | |
| <p>8. Solve using mental math:</p> <p>(a) $1000 - 843 = \underline{\hspace{2cm}}$ (b) $458 + 998 = \underline{\hspace{2cm}}$ [2]</p> <p>(c) $4539 - 997 = \underline{\hspace{2cm}}$ (d) $5984 - 405 = \underline{\hspace{2cm}}$ [2]</p> <p>(e) $500 \times 8000 = \underline{\hspace{2cm}}$ (f) $54,000 \div 6 = \underline{\hspace{2cm}}$ [2]</p> <p>(g) $43 \times 99 = \underline{\hspace{2cm}}$ (h) $16 \times 25 = \underline{\hspace{2cm}}$ [2]</p> | |

9. Find the number represented by n

(a) $n - 35,000 = 42,000$

$n = \underline{\hspace{2cm}}$

(b) $863,000,000 + n = 872,000,000$ [2]

$n = \underline{\hspace{2cm}}$

(c) $n \times 7 = 42,000,000$

$n = \underline{\hspace{2cm}}$

(d) $360,000 \div n = 40,000$ [2]

$n = \underline{\hspace{2cm}}$

(e) $64 \times 2 = n \times 4$

$n = \underline{\hspace{2cm}}$

(f) $56 - 8 \times 5 + 4 = n$ [2]

$n = \underline{\hspace{2cm}}$

(g) $72 \div (4 + 8) = n \div 12$

$n = \underline{\hspace{2cm}}$

(h) $n = 200 - 100 \div 10 \times (4 + 6)$ [2]

$n = \underline{\hspace{2cm}}$

10. Jonas has \$100. He wants to buy a game that costs \$69.20, a book that costs \$19.95. Does he have enough money to also buy a watch that costs 22.80? Use estimation. [2]

11. Estimate the answer, and then divide. Give your answer as quotient and remainder, if there is a remainder. [4]

(a) $3120 \div 8$

Estimate: $\underline{\hspace{2cm}}$

Answer: $\underline{\hspace{2cm}}$

(b) $2080 \div 6$

Estimate: $\underline{\hspace{2cm}}$

Answer: $\underline{\hspace{2cm}}$

12. Estimate the answer, and then multiply. [4]

(a) 386×54

(b) 2409×79

Estimate: _____

Estimate: _____

Answer: _____

Answer: _____

13. During the last half year, Mr. Wilson's salary was \$1985 each month. He saved \$4025 during that time and spent the rest. How much did he spend? [3]

14. A bottle contains blue beads and red beads. The number of red beads is 4 times the number of blue beads. If there are 3568 red beads, how many more red beads than blue beads are there? [3]

15. Some string 2305 in. long was cut into two unequal pieces. One piece was 55 inches longer than the other. What is the length of the shorter piece? [3]

16. Write $>$, $<$, or $=$ in each \bigcirc

(a) $30 \bigcirc -90$

(b) $-20 \bigcirc -10$ [2]

(c) $\frac{2}{3} \bigcirc \frac{6}{15}$

(d) $5 - \frac{2}{5} \bigcirc \frac{18}{5}$ [2]

17. Give each answer as a mixed number or a whole number in simplest form.

(a) $1 + \frac{26}{6} =$

(b) $\frac{3}{4} + \frac{5}{8} =$ [2]

(c) $\frac{5}{12} - \frac{1}{3} =$

(d) $\frac{2}{3}$ of 18 = [2]

(e) 4 out of 10 =

(f) $26 \div 8 =$ [2]

18. In a group of 30 children, 12 are boys. Express the number of girls as a fraction of the children in the group. [3]

19. Peter had a board 3 m long. He used $\frac{3}{4}$ of its length as a bookshelf. How long was the bookshelf? Give your answer in meters and in simplest form. [3]

20. $\frac{2}{5}$ of the children in a club are girls.

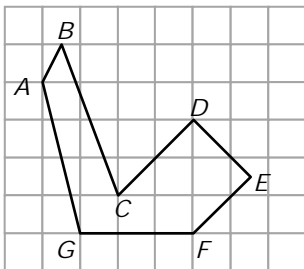
(a) If there are 24 boys, how many children are there altogether? [2]

(b) How many more boys than girls are there? [2]

21. Mary had some cookies. She gave $\frac{2}{9}$ of them to Matthew and ate $\frac{1}{3}$ of them. She had 8 cookies left. How many did she have at first? [3]

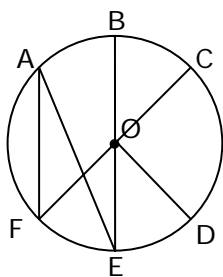
22. A $\frac{3}{4}$ turn is _____ right angles and is _____ degrees. [1]

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



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

24. In this figure, point O is the center of the circle. A, B, C, D, E, and F are points on the circle.



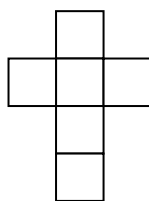
(a) Name the diameters. _____ [1]

(b) Name the radii. _____ [1]

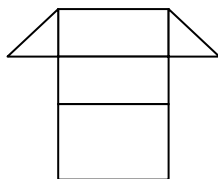
(c) OC is 10 cm. How long is BE? _____ [1]

(d) Which is longer, AE or CF? _____ [1]

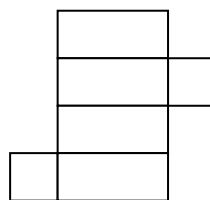
25. Which of these is a net of a rectangular prism? _____ [2]



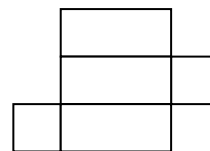
A



B

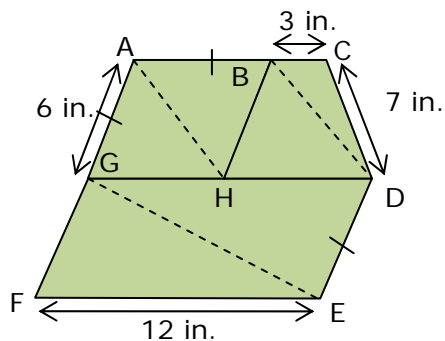


C



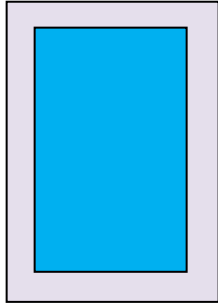
D

26. This figure ACDEF is a pentagon and is made up of the three quadrilaterals, ABHG, BCDH, and GDEF. Two of these quadrilaterals are parallelograms and one is a trapezoid. $GA = AB = DE = 6$ in., $BC = 3$ in., $CD = 7$ in., $EF = 12$ in.



- (a) Quadrilateral GDEF has _____ right angles, _____ obtuse angles, [1]
and _____ acute angles.
- (b) Which quadrilateral is the trapezoid? _____. [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 [1]
triangles. If $GE = 14$ in, what is the perimeter of triangle GFE?
_____ in.
- (e) Which of the triangles are: [3]
Scalene: _____
Isosceles: _____
Equilateral: _____
Have one obtuse angle: _____
- (f) The perimeter of the figure ACDEF is _____ in. [1]

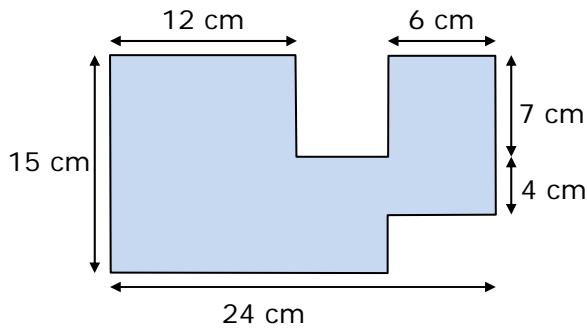
27. A rectangular swimming pool measures 24 m by 16 m.



(a) Write a formula for the area of a rectangle, and then use the formula to 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? [2]

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



(a) Find the area of the figure. _____ [2]

(b) Find the perimeter. _____ [2]

Answer Key

1. (a) eight hundred thirty-two million, nine hundred fifty-one thousand, seventy-six
(b) 5
(c) 30,000,000, or thirty million
(d) 832,000,000
(e) 999,999
(f) 833,051,076
(g) 832,950,976
(h) 833,000,000
(i) 1; -1
2. -30
3. 0, -5, -10
4. -12, -7, -2, 0, 12
5. (a) 1, 2, 3, 4, 5, 6, 10, 12, 15, 20, 30, 60
(b) 3, 5
6. 1, 3
7. 18, 36
8. (a) 157 (b) 1456
(c) 3542 (d) 5579
(e) 4,000,000 (f) 9
(g) 4257 (h) 400
9. (a) 77,000 (b) 9,000,000
(c) 6,000,000 (d) 9
(e) 32 (f) 9000
(g) 72 (h) 100
10. No
11. (a) 400; 390
(b) 300; 346 r4
12. (a) 20,000; 20,844
(b) 160,000; 190,311
13. \$7885
14. 2676
15. 1125 in.
16. (a) > (b) <
(c) > (d) >
17. (a) $5\frac{1}{3}$ (b) $1\frac{3}{8}$
(c) $\frac{1}{12}$ (d) 12
(e) $\frac{2}{5}$ (f) $3\frac{1}{4}$
18. $\frac{3}{5}$
19. $2\frac{1}{4}$ m
20. (a) 40 (b) 8
21. 18
22. 3; 270
23. (a) CD and EF
(b) CD and DE or DE and EF
24. (a) BE, CF
(b) OB, OC, OD, OE, OF
(c) 20 cm (d) CF
25. A, C
26. 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 in.
27. (a) $A = l \times w$
or Area = length x width
 $24 \text{ m} \times 16 \text{ m} = 384 \text{ m}^2$
(b) 176 m^2
28. (a) 294 cm^2 (b) 92 cm