

SEA Practice Test 5

MATHEMATICS

Based on the Revised SEA Framework 2021-2023

School:

Student's Name:

Date:

INSTRUCTIONS

This test is divided into THREE sections with a total of 40 questions.

SECTION 1 has 20 questions (nos. 1-20), Section 2 has 16 questions (nos. 21-36) and SECTION 3 has 4 questions. (nos. 37-40).

You have 75 minutes to answer ALL questions. Read each question carefully and show all working in the space provided. Marks will be given for correct steps taken.

DO NOT BEGIN UNTIL YOU ARE TOLD TO DO SO.

SEA Practice Test 1 - Mathematics (75 minutes)

Section 1

1. Calculate $36.42 \div 1.5$

Answer: _____ (1 mark)

2. Round off 4.6 to a whole number.

Answer: _____ (1 mark)

3. Write twenty-six thousand, nine hundred and thirty-one as a number.

Answer: _____ (1 mark)

4. Write one word to describe all the shapes below.



Answer: _____ (1 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

5. If the mean of four numbers is 84. Calculate the sum of the numbers.

Answer: _____

(1 mark)

6. Calculate: $\frac{3}{8} + \frac{3}{4}$

Answer: _____

(1 mark)

7. Marina had 34 comics and her brother Val had 12 comics more than Marina. How many comics do they have altogether?

Answer: _____

(1 mark)

8. Complete the pattern shown below.

0.125 0.25 0.5 _____

Answer: _____

(1 mark)

9. Select the hundredths digit below.

156.048

Answer: _____

(2 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

10. Complete the statement below:

$$54 \times 11 = (34 + \square) \times 11$$

Answer: _____

(1 mark)

11. Calculate the value of the missing number below.

$$\frac{3}{7} = \frac{12}{?}$$

Answer: _____

(1 mark)

12. How much is 20% of 986?

Answer: _____

(2 mark)

13. The sum of which value below add up to a whole?

$\frac{1}{4}$ 15% 35% 0.6

Answer: _____

(1 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

14. Express 0.26 as percent.

Answer: _____

(1 mark)

15. Calculate: 4 m 54 cm – 2 m 69 cm

Answer: _____

(1 mark)

16. Name the solid with the properties shown below.

Number of surfaces	Number of edges
1	0

Answer: _____

(1 mark)

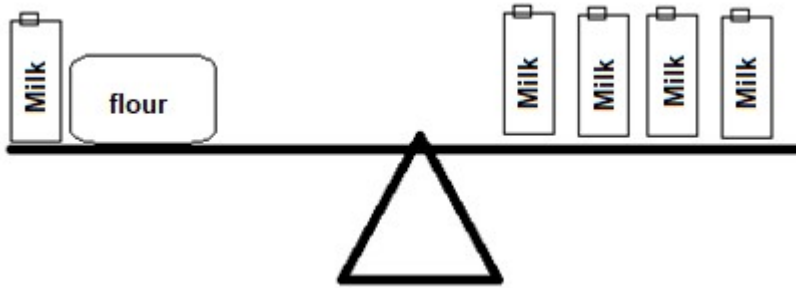
17. Calculate the cost of 1 kg of baked beans based on the rates shown below.



(1 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

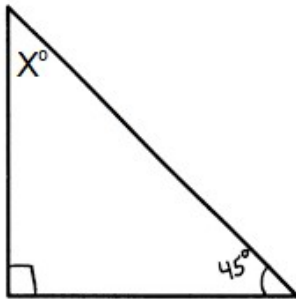
18. A pack of milk has a mass of 900 g. How heavy is the sack of flour.



Answer: _____

(2 mark)

19. What is the angle X below? Circle showing two angles with one missing degree.



Answer: _____

(1 mark)

20. A fast car travelled at 301m an hour. How far did it travel in $1\frac{1}{2}$ hours?

Answer: _____

(1 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

SECTION 2

21. What is the least number of pencils that can be shared exactly among groups of 4 or 6 children?

Answer: _____

(2 mark)

22. 26 buttons are divided into piles containing 8 buttons each. What percent of the buttons are placed in piles?

Answer: _____

(2 marks)

23. 96 mangoes were stacked in bags containing 12 mangoes each. If a bag of mangoes sells for \$10.00, what is the total the seller can get selling all the mangoes?

Answer: _____

(2 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

24. The price of 20% of oranges on sale is \$54. What is $\frac{3}{4}$ of the same number of oranges?

Answer: _____

(2 mark)

25. Brenda purchased a bed costing \$6900 on hire purchase. Brenda paid 25% down payment and paid off \$600 in 9 instalments. Calculate the total cost she paid for the bed.

Answer: _____

(3 mark)

26. Complete the bill below.

Quantity	Particular	Unit Price	Total Price
2 tins	Peas and carrots	\$5.25	\$10.50
6 containers	milk	\$_____	\$52.20
4 sticks	butter	\$6.00	\$_____
1 loaf	bread	\$16.60	\$16.60
	Total		_____

(3 mark)

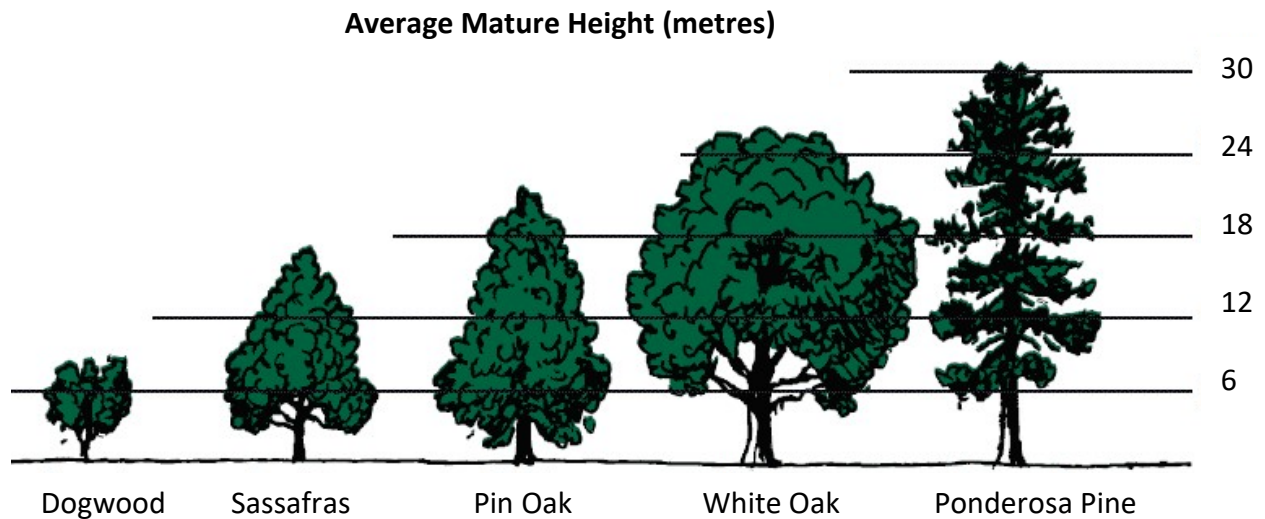
SEA Practice Test 1 - Mathematics (75 minutes)

27. Julie has 16 cases of juice with each case containing 12 cans of juice. How many cans of juice does Julie have rounded off to the nearest 10?

Answer: _____

(2 mark)

28. Sue has collected the heights of some types of trees. This information was then shown in the pictograph below.



Answer: _____

(1 mark)

b. How much is Ponderosa Pine taller than Sassafras ?

Answer: _____

(1 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

29. A piece of rope is 3.68 metres long. Calculate the total length of three similar pieces of rope, then round off your answer to the nearest tenth of a metre.

Answer: _____

(2 marks)

30. Phil has a sack of flour weighs 98 kg. $\frac{1}{4}$ of the flour was used to make hops bread for the homeless; the remainder was placed into smaller bags holding 900 grams of flour each. How many smaller bags containing 900 g of flour could Phil get from the sack of flour?

Answer: _____

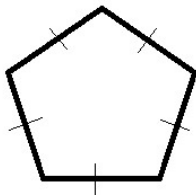
(3 marks)

31. a) What shape is shown below?

Answer: _____

(1 mark)

- b) The perimeter of the shape below is 45 cm, calculate the length of the one side.

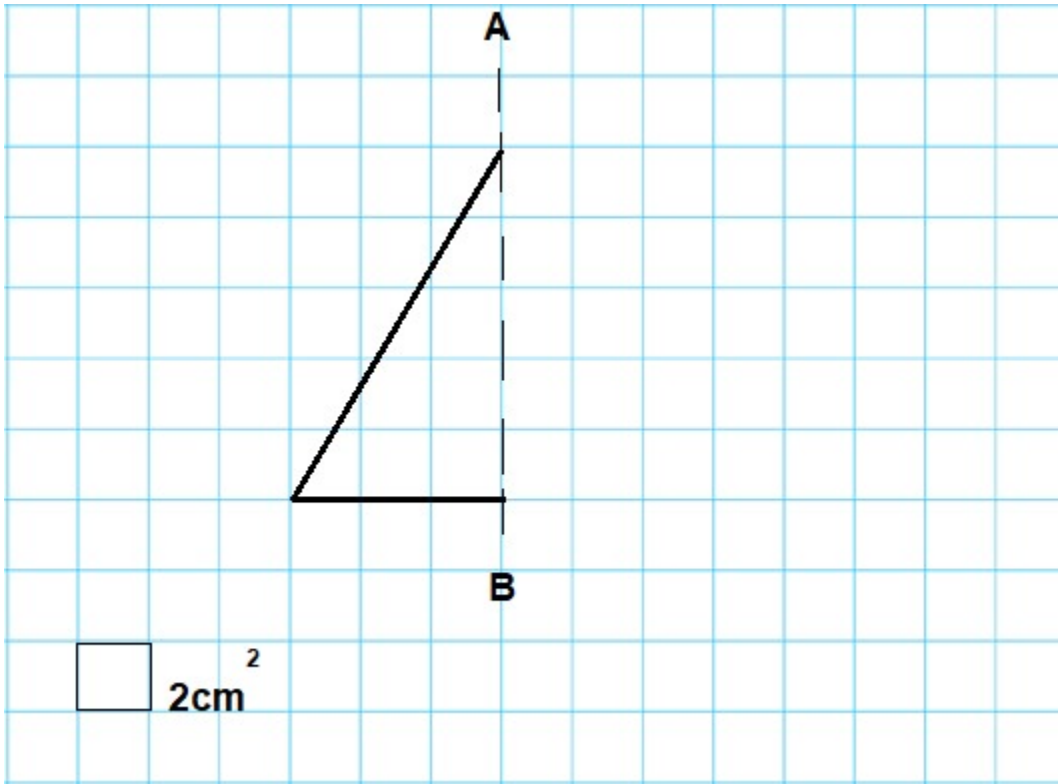


Answer: _____

(2 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

32. a) Complete the shape below using AB as a line of symmetry.



b) What is the area of the shape above?

Answer: _____

(1 mark)

c) Name the shape drawn above?

Answer: _____

(1 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

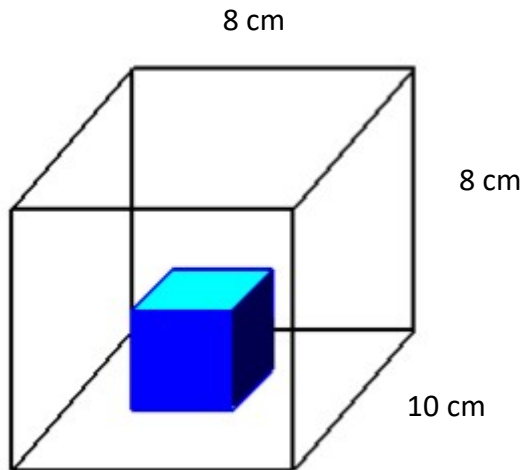
33. Felicia sells fruits at a corner stall. Below represents the average number of fruits sold in a particular day. How much fruits should Felicia expect to sell in one week?



Answer: _____

(3 mark)

34. A larger box contains cubes of equal size. Each cube measures 4 cm on all sides. How many cubes of the same size are needed to fill the box below?

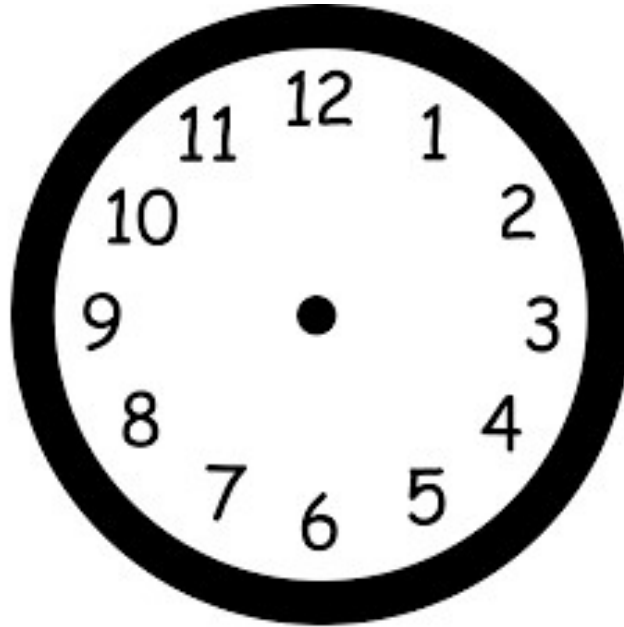


Answer: _____

(3 marks)

SEA Practice Test 1 - Mathematics (75 minutes)

35. A hockey game started at 4:40 pm the hockey game comprised of 3 play periods that lasted 25 minutes each and 2 intermissions that lasted 10 minutes each. Show on the clock below the time that hockey game ended.

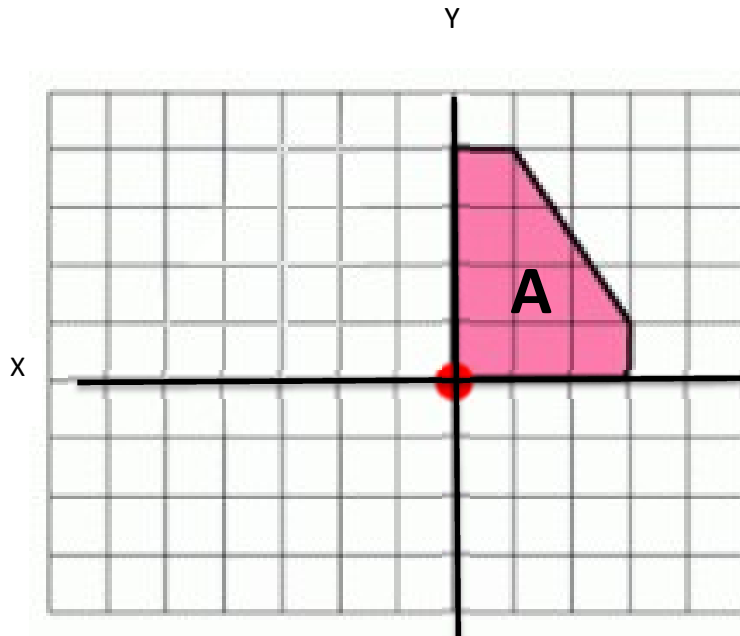


(3 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

36.

- a) Reflect the given shape in X-axis on the graph below and label it B.
- b) Reflect the shape B in the Y-axis on the graph below and label it C.



(2 marks)

- c) Describe the rotation that maps shape C to A.

(1 marks)

SEA Practice Test 1 - Mathematics (75 minutes)

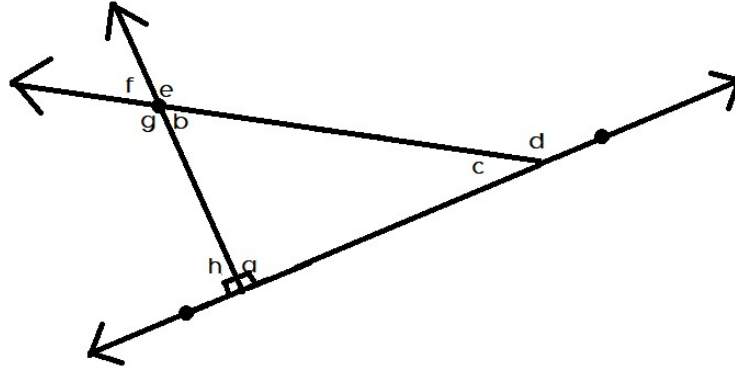
SECTION 3

37. Susan sells a cup of lemon juice for \$0.75. A cup can hold 250 ml of lemon juice. If a container can hold 5 litres of lemon juice how many, containers of lemon juice would she need to make \$90 a day?

Answer: _____

(4 mark)

38. Eight angles are marked in the diagram below.



Complete the table.

a. Number of acute angles.	b. Number of obtuse angles.	c. Number of angles equal to a right angle.	d. Two angles equal to a half turn.

(4 mark)

SEA Practice Test 1 - Mathematics (75 minutes)

39. Danny started with \$350 at the fare. On the first game, he gained \$120. On the second game, he lost 10% of his money. On the third game he lost $\frac{1}{4}$ of his money. How much money does Danny have left after the third game?

Answer: _____

(4 mark)

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40. At a graduation ceremony, there were seats for 200 children. 90% of the seats were occupied. Guests were seated around tables which accommodated eight 4 or 6 persons. $\frac{2}{5}$ of the children present were seated around tables which can accommodate 4 children and rest were seated around tables which can accommodate 6 children. What is the total number of tables used to accommodate all the children at the ceremony?

Answer: _____

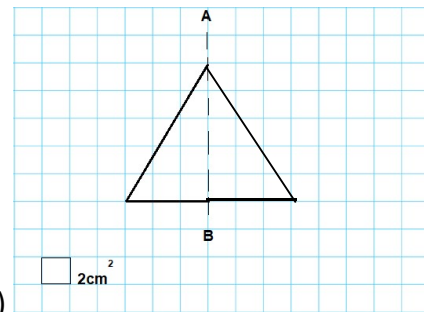
(4 marks)

END OF EXAM

SEA Practice Test 1 - Mathematics (75 minutes)

Answers:

1. 24.28
2. $4.6 \approx 5$
3. 26931
4. solids
5. $84 \times 4 = 336$
6. $\frac{3}{8} + \frac{3}{4} = \frac{9}{8} = 1\frac{1}{8}$
7. $34 + (34 + 12) = 80$
8. 0.125, 0.25, 0.5, 1
9. hundredths digit - 4
10. $54 \times 11 = (34 + \square) \times 11$
 $54 = 34 + \square$
 $54 - 34 = 20$
 Ans: $54 \times 11 = (34 + 20) \times 11$
11. $\frac{3}{7} = \frac{12}{?}$
 $12 \times 7 = 3x?$
 $84 \div 3 = 28$ Ans.
12. $20/100 \times 986 = 197.2$
13. $0.6 + 15\% + \frac{1}{4} = 1$
14. 26%
15. 4 m 54cm - 2m 69cm = 1m 85cm
16. sphere
17. 400g = 650
 $1\text{kg} = 1000\text{g} = 650/400 \times 1000 = \16.25
18. 1 pack of milk = 900g
 1 pack flour = 3pk milk = $3 \times 900 = 2700\text{g}$
19. $X = 180 - (90 + 45) = 45^\circ$
20. 1 hr = 301m
 $1\frac{1}{2} = 301 + 301/2 = 451.5\text{m}$
21. Multiples:
 $4 = 4, 8, 12, 16, 20, 24$
 $6 = 6, 12, 18, 24$
 Ans. = 24
22. $26/8 = 3$ piles of 8 is 24
 $24/26 = 0.923$ or 92%
23. No. of bags $96/12 = 8$ bags
 Sells: $8 \times \$10 = \80 (Ans.)
24. 20% = \$54
 $\frac{3}{4} = 75\% = 54/20 \times 75 = \202.50 (Ans.)
25. Down payment = $25/100 \times 900 = \$1725$
 9 payments = $\$600 \times 9 = \5400
 Total py = $1725 + 5400 = \$7125$
26. Unit price = \$8.70
 Butter = $4 \times \$6 = \24
 Total = $10.50 + 52.20 + 24 + 16.60 = \103.30
27. 16 cases = $16 \times 12 = 192$ cans; Ans. = 190
28. Dogwood = 9
 Sassafras = 18
 Pin oak = 21
 White oak = 25
 Ponderosa = 90
 Total = 163
 a) Ave. = $163/5 = 32.6$ m
 b) $90 - 18 = 72$ m
29. $3.68 \times 3 = 11.04 \approx 11.0$
30. Used = $1/4 \times 98 = 24.5$
 placed in bags = $98 - 24.5 = 73.5$
 $(73.5 \times 1000)/900 = 81.66$
 81 bags (ans.)
31. a) pentagon, (b)s = $45/5 = 9\text{cm}$



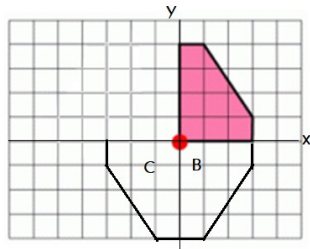
32. a)
 c) Area = $15 \times 2 = 30\text{cm}^2$
33. 1 day sales:
 Bananas = $7 \times 5 = 35$
 Apples = $3 \times 5 = 15$
 Pineapples = $4 \times 5 = 20$

SEA Practice Test 1 - Mathematics (75 minutes)

Total=35+15+20=68 fruits
 Amount of buckets=30/6=5 buckets
 of water to full half the barrel

34. Capacity of box= $10 \times 8 \times 8 = 640 \text{ cm}^3$
 Capacity of cubes= $4 \times 4 \times 4 = 64 \text{ cm}^3$
 Amt needed to fill box= $640/64 = 10$
 boxes

35. 3 play periods= $3 \times 25 = 75$ min
 2 intermission= $2 \times 10 = 20$ min
 Total play time= $75 + 20 = 95$ min
 Time ended= $4:40 + 95 = 6:15$



36. A) b) the object rotated at 180° from the centre.

37. $5l = 5 \times 1000 = 5000 \text{ ml}$
 Amt of cus per container= $5000/250 = 20$ cups
 Sale per container= $20 \times 0.75 = \$15$
 Amt of containers needed to make \$90 per day= $90/15 = 6$ containers

38. a- (less than 90°) = c, b, r = 3
 b- (more than 90°) = g, e, d = 3
 c- (equal to 90°) = h, a = 2
 d- (half turns) = (c, d) or (e, b) or (r, g) or (h, a)

39. Gained $120 = 350 + 120 = \$470$
 Lost $10\% = 470 \times 90/100 = \423
 Lost $\frac{1}{4} = 3/4 \times 423 = 4317.25$

40. Occupied seats= $200 \times 90/100 = 180$

Tables w/ 4 seats= $2/5 \times 180 = 72$;
 $72/4 = 18$ tables w/ 4 seats
 Tables w/ 6 seats= $180 - 72 = 108$;
 $108/6 = 18$ tables
 Total tables= $18 + 18 = 36$ tables