

**Test:** Primary 6 Math (Term 4) - SCGS

**Points:** 97 points

**Name:** \_\_\_\_\_

**Score:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

Select multiple choice answers with a cross or tick:

- Only select one answer
- Can select multiple answers

### Question 1 of 54

Primary 6 Math (Prelim) 1 pt

**For each question, four options are given. One of them is the correct answer. (20 marks)**

What is the value of the digit 7 in 507 030?

- A) 7
- B) 70
- C) 700
- D) 7000

### Question 2 of 54

Primary 6 Math (Prelim) 2 pts

**Kavani packed 30 sweets equally into some goodie bags. She also packed 48 chocolates equally into these good bags. How many sweets and chocolates are there in each bag?** *goodie*

- A) 6
- B) 12
- C) 13
- D) 4

**Question 3 of 54**

Primary 6 Math (Prelim) 2 pts

25% of the fruits at the fruit stall are oranges. 20% of the remainder are apples. The rest are pears. What percentage of the fruits are pears?

- A) 5%
- B) 15%
- C) 55%
- D) 60%

**Question 4 of 54**

Primary 6 Math (Prelim) 2 pts

Dani can read 4 pages in 18 minutes. How long will she take to finish a book with 30 pages?

- A) 1h 15 min
- B) 1h 35 min
- C) 2h 15 min
- D) 2h 35 min

**Question 5 of 54**

Primary 6 Math (Prelim) 2 pts

There was a \$3 discount for every \$30 spent at a departmental store. Charlotte paid \$82 for the dress. What was the original price of that dress?

- A) \$84
- B) \$88
- C) \$90
- D) \$91

**Question 6 of 54**

Primary 6 Math (Prelim) 1 pt

Find the value of  $0.16 \div 40$ .

- A) 0.004
- B) 0.04
- C) 0.4
- D) 4

**Question 7 of 54**

Primary 6 Math (Prelim) 1 pt

What is the approximate height of a flagpole?

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- A) 45 cm
- B) 250 cm
- C) 52.5 m
- D) 0.15 km

**Question 8 of 54**

Primary 6 Math (Prelim) 1 pt

Which of the following fraction is closest to  $\frac{1}{3}$ ?

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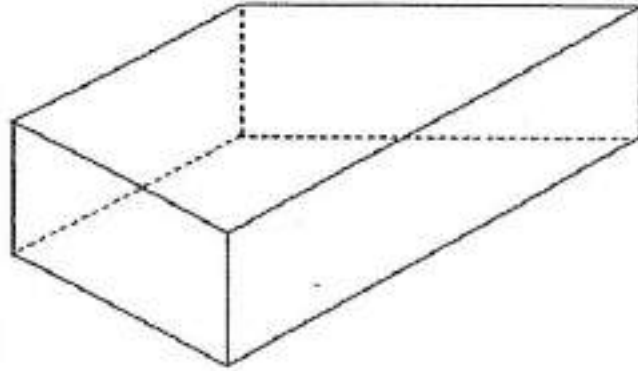
- A)  $\frac{1}{6}$
- B)  $\frac{4}{9}$
- C)  $\frac{1}{12}$
- D)  $\frac{4}{15}$

**Question 9 of 54**

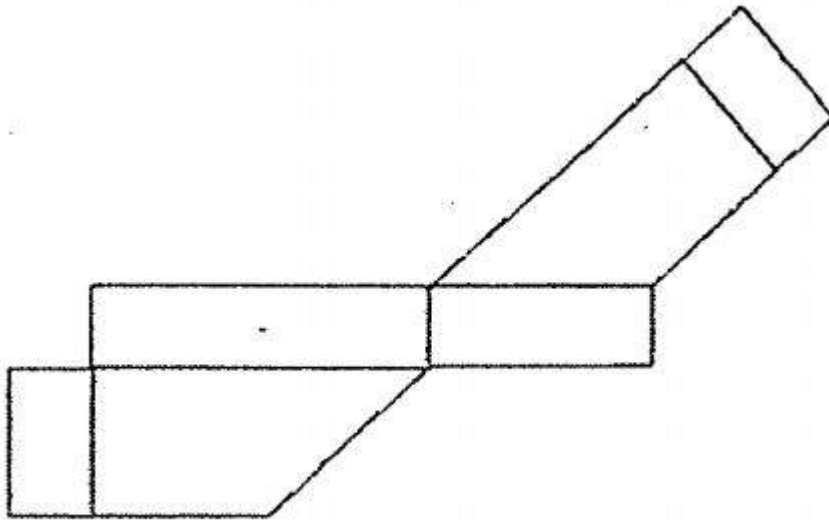
Primary 6 Math (Prelim)

2 pts

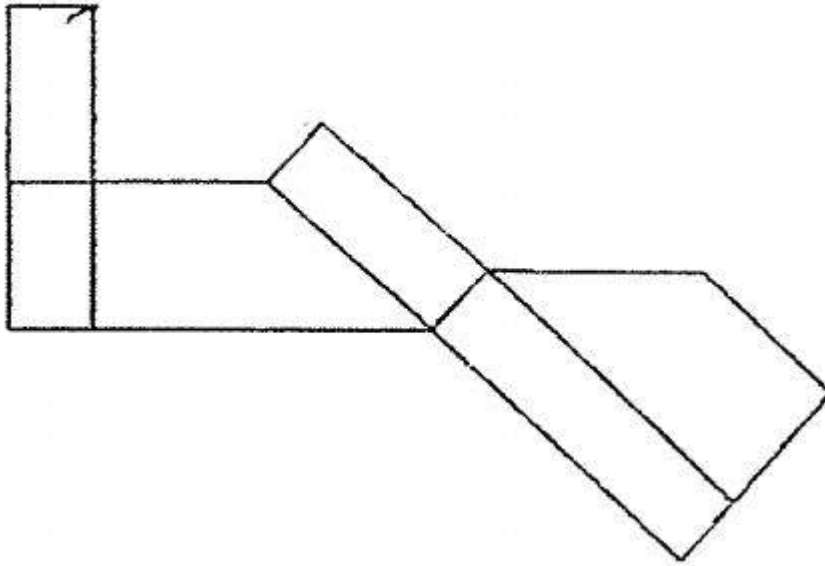
Which of the following is the net of the cuboid below?



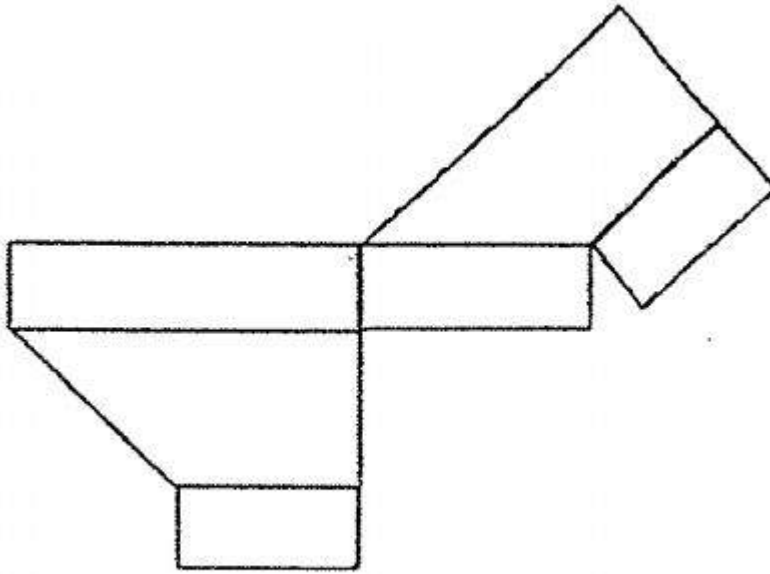
A)



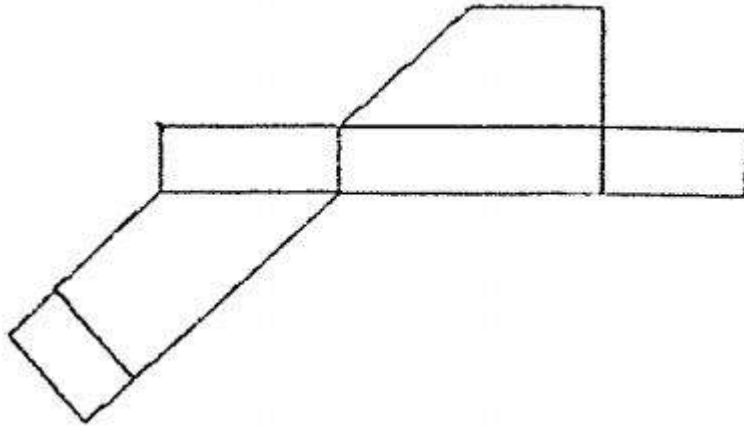
B)



C)



D)

**Question 10 of 54**

Primary 6 Math (Prelim) 1 pt

What is the value of  $36 - 6 / 3 + 2 \times 4$ ?

- A) 18
- B) 26
- C) 42
- D) 48

**Question 11 of 54**

Primary 6 Math (Prelim) 1 pt

The square is cut from the center into 4 parts. Which of the following three parts will add up to form  $\frac{5}{8}$  of the square?

- A) A, B and C
- B) A, B and D
- C) A, C and D
- D) B, C and D

**Question 12 of 54**

Primary 6 Math (Prelim) 1 pt

Fine the sum of all the factors of 12.

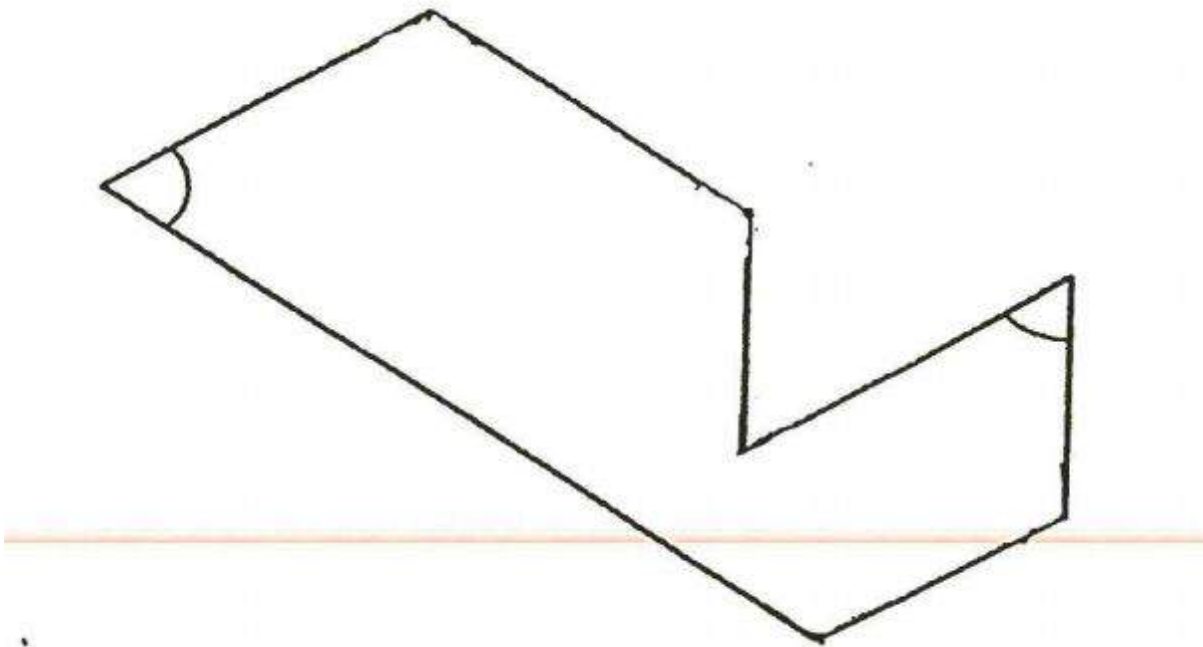
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- A) 13  
 B) 15  
 C) 27  
 D) 28

**Question 13 of 54**

Primary 6 Math (Prelim) 1 pt

In the figure below, how many angles are greater than  $90^\circ$ ?

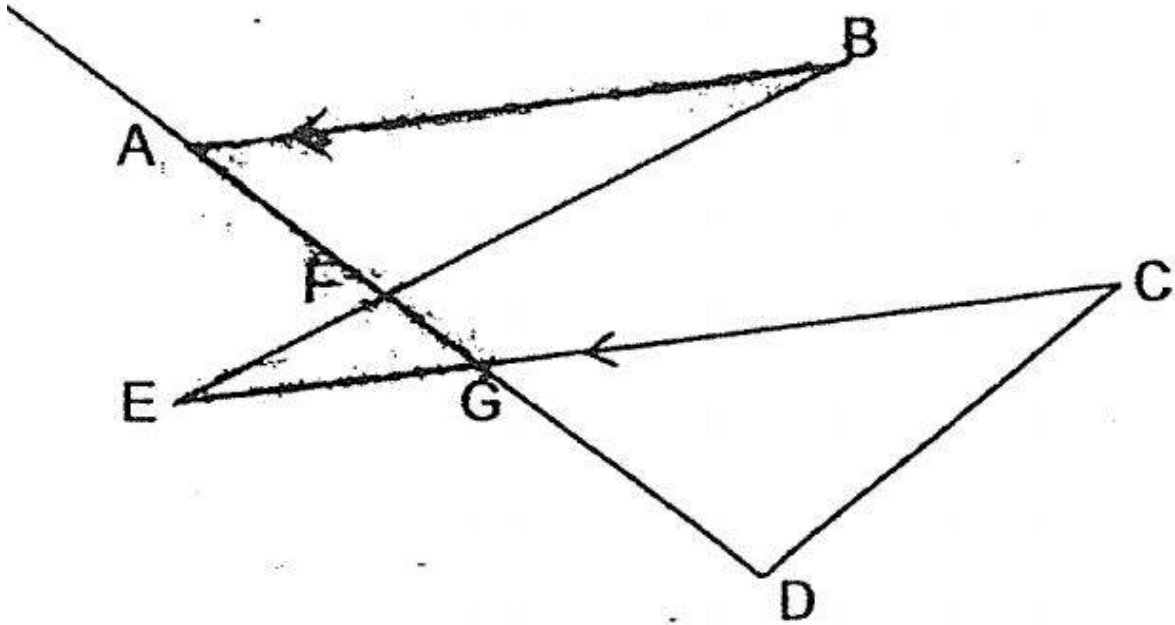


- A) 5  
 B) 2  
 C) 3  
 D) 7

## Question 14 of 54

Primary 6 Math (Prelim) 1 pt

Which angle is similar to  $\angle BAF$ ?



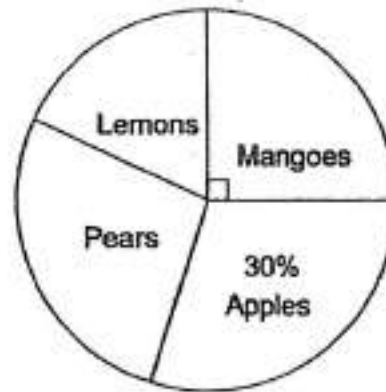
- A) Angle AGC
- B) Angle AGE
- C) Angle BEC
- D) Angle BFD



## Question 15 of 54

Primary 6 Math (Prelim) 1 pt

Mr Chong sold fruits as shown in the pie chart below. He sold  $\frac{2}{3}$  as many lemons as pears. What is the ratio of the number of apples to the number of lemons sold?



- A) 2:03
- B) 3:01
- C) 3:02
- D) 5:03

## Question 16 of 54

Primary 6 Math (Prelim) 1 pt

Each question carries 1 mark. Write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (5 marks)

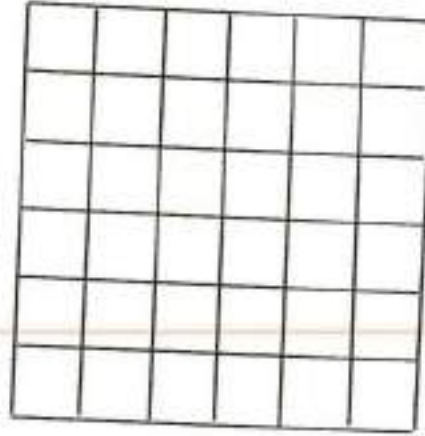
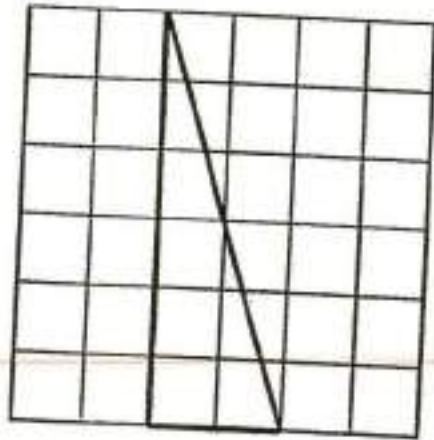
Find the value of A.



## Question 17 of 54

Primary 6 Math (Prelim) 0 pts

Draw an isosceles triangle with half the area as the triangle shown below.



(2 marks)

*This question is designed for extended answers that parent/ teacher will have to assign and guide child to attempt after the test has been completed.*

*Grading: This question type is not graded on this system and will not affect the final score as it was designed in such a way that it requires manual assistance.*

## Question 18 of 54

Primary 6 Math (Prelim) 1 pt

**Each question carries 2 marks. Show your working clearly and write your answers in the spaces provided. For questions which require units, give your answers in the units stated. (20 marks)**

Use all the digits 3, 4, 5, 8 to form the largest even number.

**Question 19 of 54**

Primary 6 Math (Prelim) 2 pts

The average of height of 3 children is 1.25 m. A 4<sup>th</sup> child joins the group. What is the average height of the 4 children if the 4<sup>th</sup> child is 1.33 m?

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**Question 20 of 54**

Primary 6 Math (Prelim) 2 pts

**Mr Lim has a bookshelf which can be fully packed with either 18 school files or 42 exercise books. Mr Tan also has an identical bookshelf. If Mr Tan has 14 exercise books in his bookshelf, how many school files are needed to fill up the bookshelf?**

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**Question 21 of 54**

Primary 6 Math (Prelim) 2 pts

The total surface area of a cube is  $54^2$  cm. Find the volume of the cube.

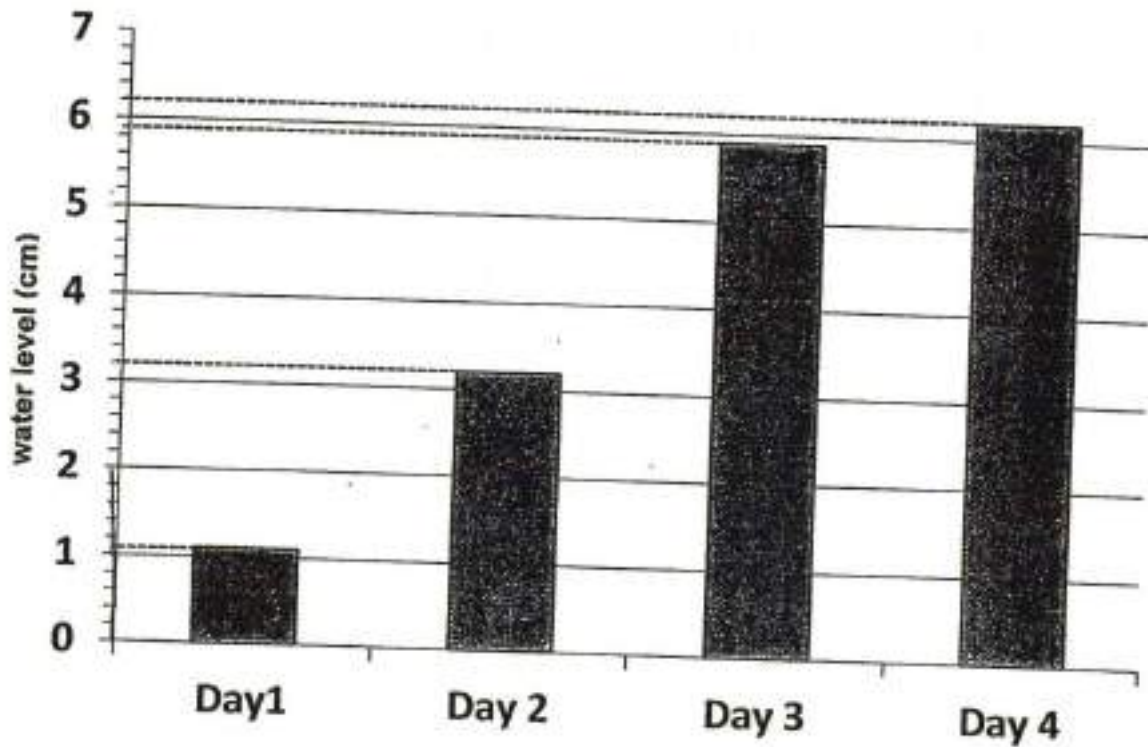
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## Question 22 of 54

Primary 6 Math (Prelim) 1 pt

Mr Chee wanted to measure the amount of rainfall during a rainy season. He placed an empty beaker and observed the water level of the beaker and the results are shown in the graph below.

- (a) What is the increase in water level from Day 1 to Day 2?  
(b) Find the average water level in the beaker over 4 days.



What is the increase in water level from Day 1 to Day 2?

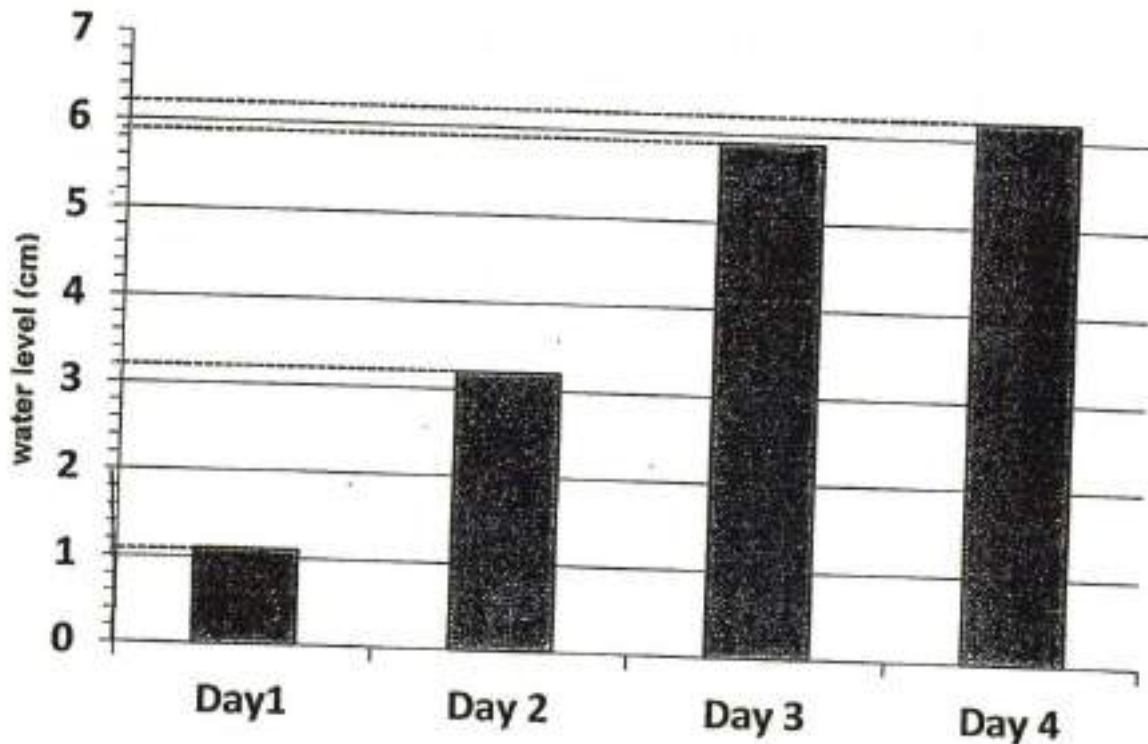
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## Question 23 of 54

Primary 6 Math (Prelim) 2 pts

Mr Chee wanted to measure the amount of rainfall during a rainy season. He placed an empty beaker and observed the water level of the beaker and the results are shown in the graph below.

- (a) What is the increase in water level from Day 1 to Day 2?  
 (b) Find the average water level in the beaker over 4 days.



Find the average water level in the beaker over 4 days?

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## Question 24 of 54

Primary 6 Math (Prelim) 2 pts

$\frac{1}{6}$  of Pauline's money is equal to  $\frac{2}{3}$  of Sandra's money. How much money does Pauline have if she has \$90 more than Sandra?

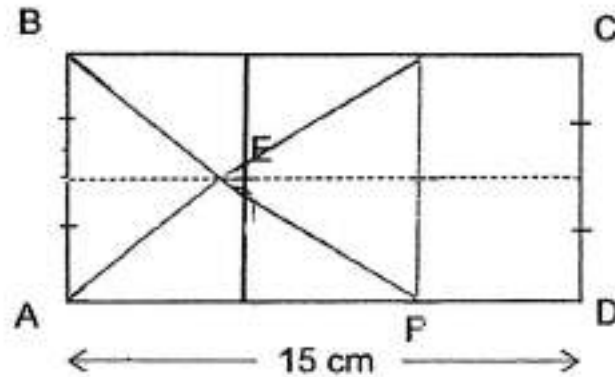
Ans: \$ \_\_\_\_\_

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## Question 25 of 54

Primary 6 Math (Prelim) 3 pts

The figure below, not drawn to scale, is made up of a rectangle  $ABCD$  and a triangle  $AEF$ . The ratio of the area of rectangle to the area of triangle is  $6 : 1$ . Find length  $AF$  given that the length of the rectangle  $AD$  is  $15$  cm.



## Question 26 of 54

Primary 6 Math (Prelim) 4 pts

Hendry and Jacky were at Town A and Town B respectively,  $39$  km apart. Hendry started driving towards Town B at a speed of  $65$  km/h.  $6$  minutes later, Jacky started driving towards Town A and eventually, they drove past each other at the midpoint of Town A and B. Find Jacky's speed.

## Question 27 of 54

Primary 6 Math (Prelim) 2 pts

Donna has an elder brother. Her brother is  $6$  years more than twice of Donna's age. How old is Donna if their total age is  $30$ ?

**Question 28 of 54**

Primary 6 Math (Prelim) 4 pts

There were red, blue and green and yellow marbles in a bag. The number of red marbles is 30% of the number of blue and green marbles. The ratio of the number of blue, green and yellow marbles to the number of the total number of marbles in the bag is 5 : 6. Given that there are 54 red marbles in the bag, how many yellow marbles are there in the bag?

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**Question 29 of 54**

Primary 6 Math (Prelim) 2 pts

Andrea baked  $y$  mini-cupcakes on Monday and five times as many on Tuesday. She then kept  $\frac{1}{3}$  of the mini-cupcakes for her family and friends and packed the remaining mini-cupcakes into packets of 3 and sold them at \$5 per packet at a school carnival.

Express the amount of money Andrea earned in terms of  $y$ .

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**Question 30 of 54**

Primary 6 Math (Prelim) 2 pts

Andrea baked  $y$  mini-cupcakes on Monday and five times as many on Tuesday. She then kept  $\frac{1}{3}$  of the mini-cupcakes for her family and friends and packed the remaining mini-cupcakes into packets of 3 and sold them at \$5 per packet at a school carnival.

Given that  $y = 75$ , how much did she earn for the carnival?

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**Question 31 of 54**

Primary 6 Math (Prelim) 1 pt

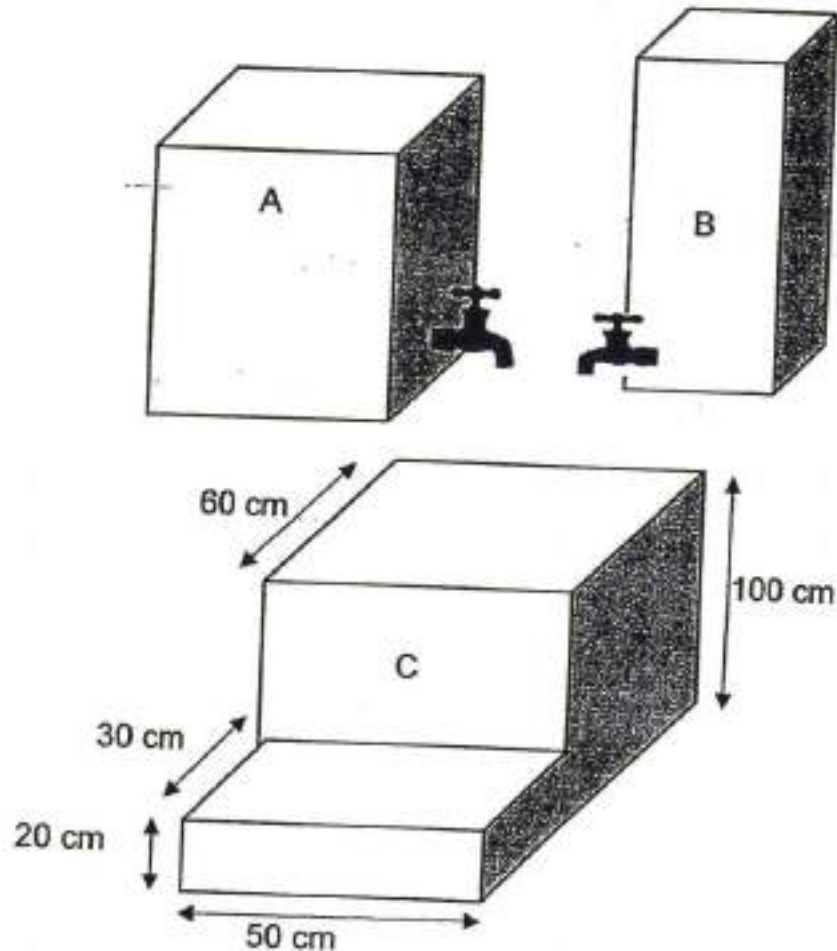
Round off 1.095 to the nearest hundredth.

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## Question 32 of 54

Primary 6 Math (Prelim) 4 pts

Mrs Wee has a cubic container A completely filled with water. Water flowed out from container A into container C as shown below. At the same time, water from container B was also filling container C at a rate of  $7200 \text{ cm}^3$  per minute. After 10 minutes, the water level in both containers A and C is half of the height of their containers. Find the length of one side of container A.



## Question 33 of 54

Primary 6 Math (Prelim) 1 pt

Find the average of 1.51, 2.02 and 3.4.



**Question 34 of 54**

Primary 6 Math (Prelim) 1 pt

Express 0.85 as a percentage.

Ans: \_\_\_\_\_ %

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**Question 35 of 54**

Primary 6 Math (Prelim) 3 pts

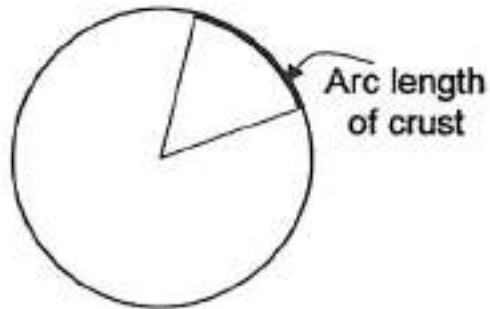
At a stationery fair, Cailin bought 4 more pens than files. Each pen costs \$2 and each file costs \$5. She spent \$28 more on files than pens. How many pens did Cailin buy?

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## Question 36 of 54

Primary 6 Math (Prelim) 1 pt

A pizza with a radius of 7 cm is shared equally among  $x$  people. What is the arc length of the crust each person will get? Express your answer in terms of  $x$ . (Take  $\pi = \frac{22}{7}$ )



Ans: \_\_\_\_\_ cm

**Question 37 of 54**

Primary 6 Math (Prelim) 2 pts

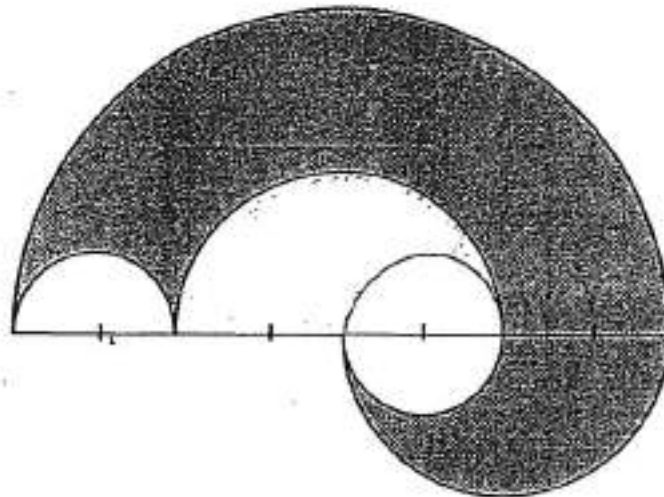
Every time Danny saves \$0.50, his father would add another \$0.20 to his savings. How much did his father put into his savings if Danny had \$14 in his savings?

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**Question 38 of 54**

Primary 6 Math (Prelim) 4 pts

The figure below is made up of semi-circles of 3 different radii. The radius of the largest semi-circle is 21cm. Find the area of the shaded figure. Round off your answers to 2 decimal places.



## Question 39 of 54

Primary 6 Math (Prelim) 3 pts

A family of 5 was considering where to go for an affordable dinner.

<p><b><u>Restaurant A</u></b>          10% discount on the 4<sup>th</sup> diner          Buffet price: \$40 per person          -No Service Charge-</p>	<p><b><u>Restaurant B</u></b>          10% Service Charge applicable</p>
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What is the average cost per person if they dined at Restaurant A?

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## Question 40 of 54

Primary 6 Math (Prelim) 2 pts

A family of 5 was considering where to go for an affordable dinner.

<p><b><u>Restaurant A</u></b>          10% discount on the 4<sup>th</sup> diner          Buffet price: \$40 per person          -No Service Charge-</p>	<p><b><u>Restaurant B</u></b>          10% Service Charge applicable</p>
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What is the maximum amount they should spend at Restaurant B before the service charge, such that their total bill would be at least \$10 less than what they would spend at Restaurant A? (Round off your answer to the nearest dollar.)

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## Question 41 of 54

Primary 6 Math (Prelim) 1 pt

Use all the digits 3, 4, 5, 8 to form a number closet to 5000.

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**Question 42 of 54**

Primary 6 Math (Prelim) 2 pts

Min Leng had 2 ℓ of milk. She poured milk into 4 equal glasses and realised that she had  $1\frac{2}{5}$  ℓ left. How much milk did she pour into each glass?

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**Question 43 of 54**

Primary 6 Math (Prelim) 2 pts

$\frac{4}{9}$  of a number is 32. What is the number?

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**Question 44 of 54**

Primary 6 Math (Prelim) 2 pts

The perimeter of the rectangle is 6 times its breadth. What is the area of the rectangle if the length is 12 cm?

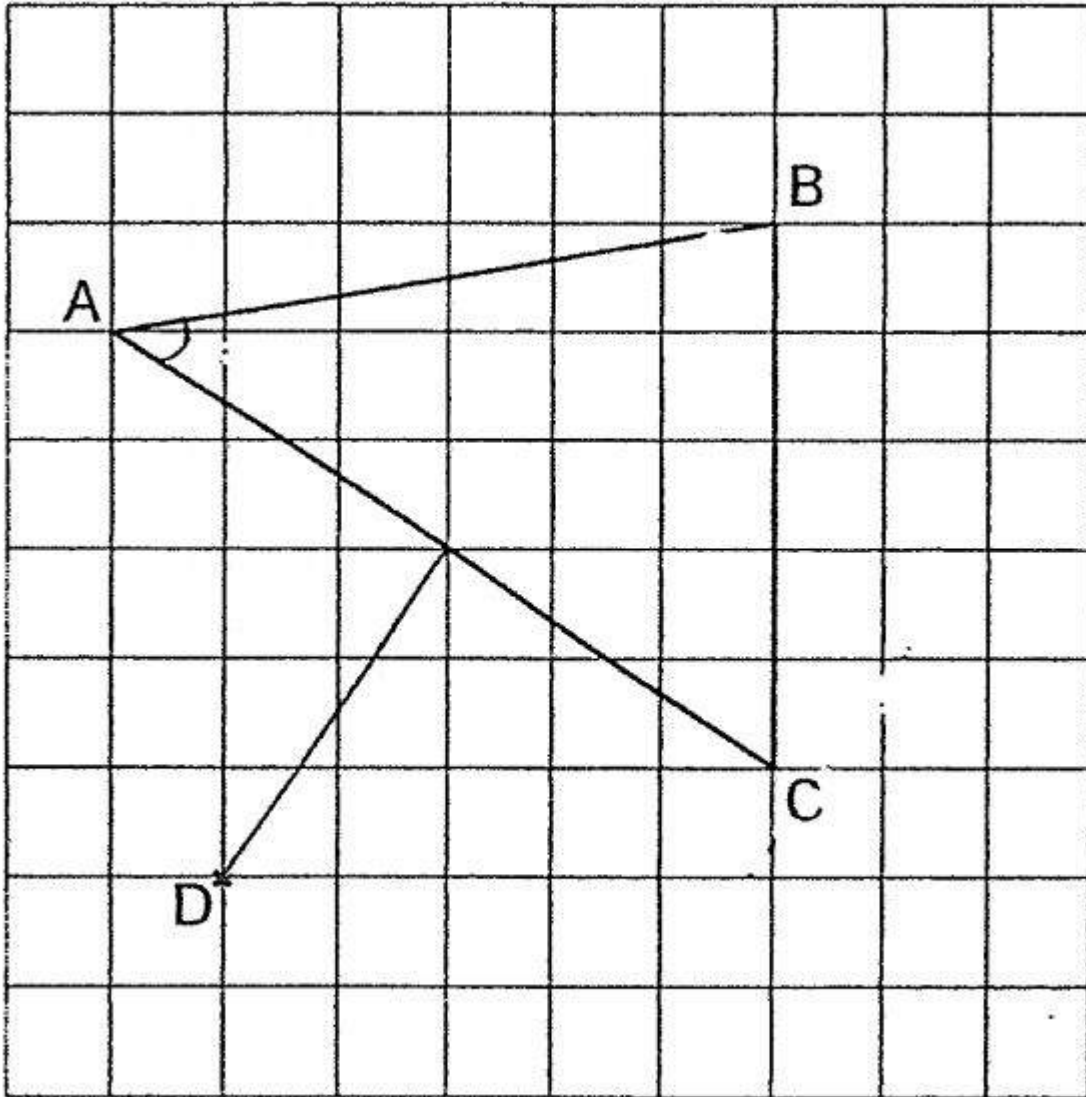
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## Question 45 of 54

Primary 6 Math (Prelim)

1 pt

Triangle ABC is drawn in the grid below.



Measure Angle ACB.

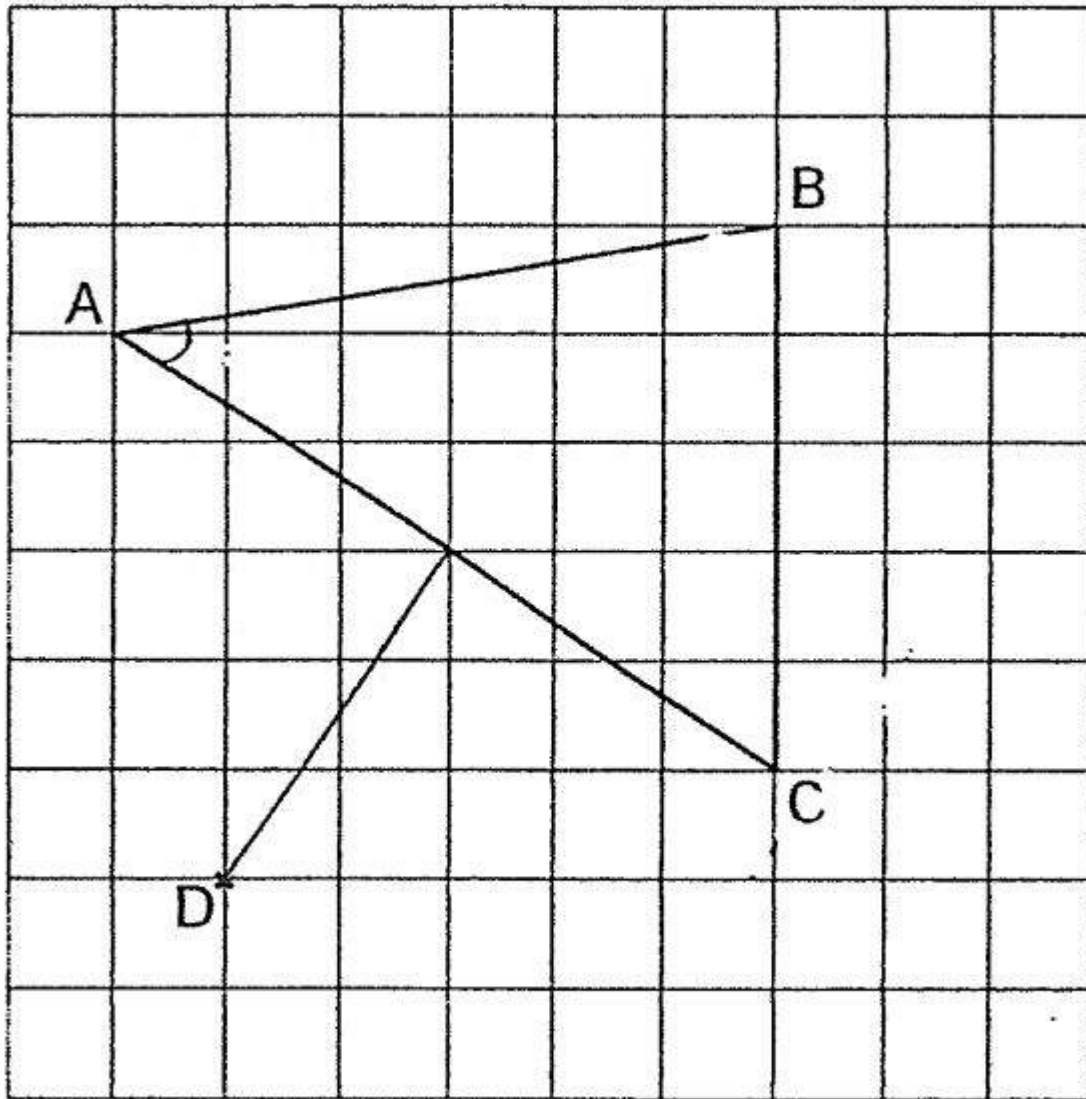
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## Question 46 of 54

Primary 6 Math (Prelim)

0 pts

Triangle ABC is drawn in the grid below.



Draw a line perpendicular to line AC that touches point D. (1 mark)

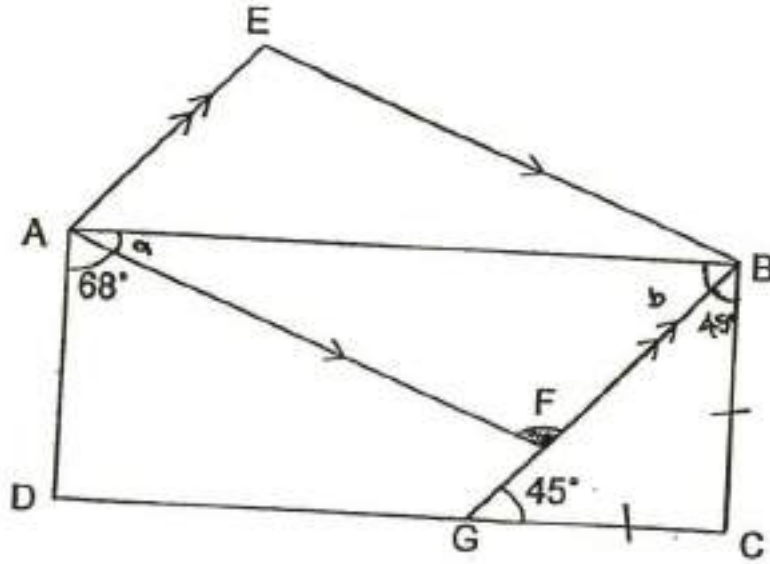
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## Question 47 of 54

Primary 6 Math (Prelim) 2 pts

The figure below is made up of rectangle  $ABCD$ , parallelogram  $AEBF$  and isosceles triangle  $BCG$ .  $\angle DAF$  is  $68^\circ$  and  $\angle BGC$  is  $45^\circ$ . Find  $\angle AFB$ .

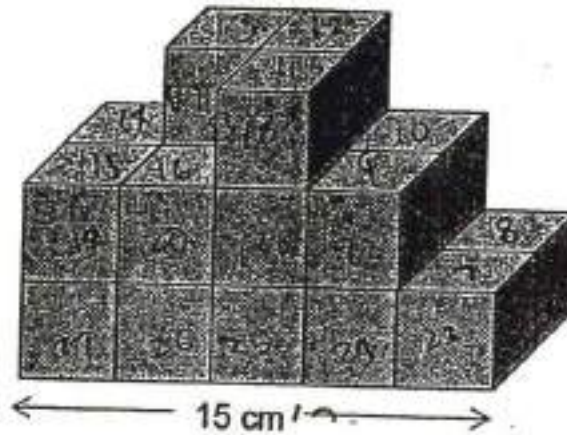




## Question 48 of 54

Primary 6 Math (Prelim) 3 pts

The figure below is made up of 21 identical cubes. Philip decided to paint the exposed surface area, including the surface area at the bottom of the figure.



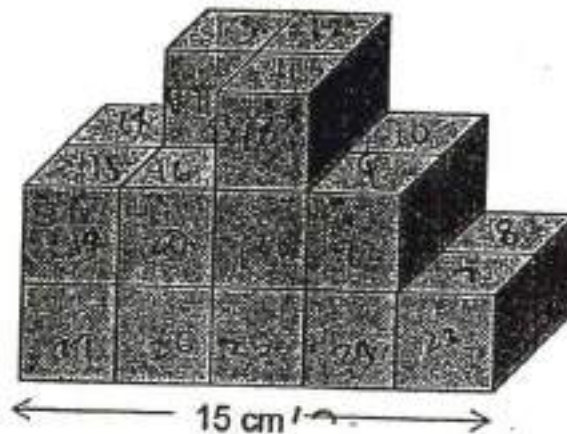
What is the total area that Philip painted?

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## Question 49 of 54

Primary 6 Math (Prelim) 2 pts

The figure below is made up of 21 identical cubes. Philip decided to paint the exposed surface area, including the surface area at the bottom of the figure.



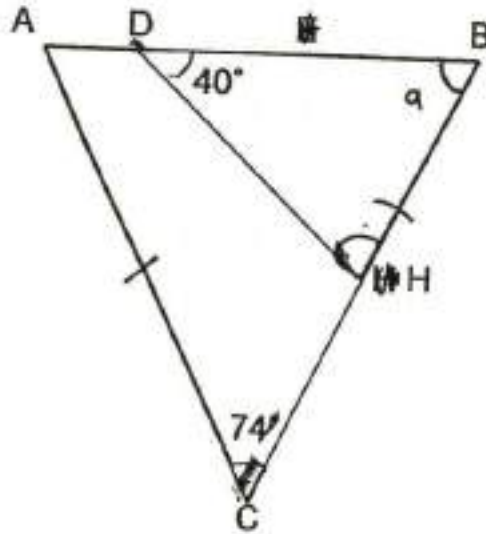
Find the number of surfaces that are not painted.

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## Question 50 of 54

Primary 6 Math (Prelim) 2 pts

In the figure below, ABC is an isosceles triangle where AC is equal to BC.  $\angle ACB$  is  $74^\circ$  and  $\angle EDF$  is  $40^\circ$ . Find  $\angle DHC$ .

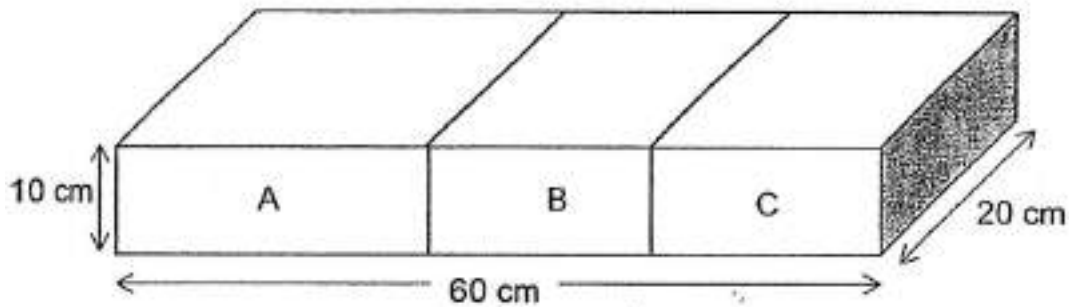


**Question 51 of 54**

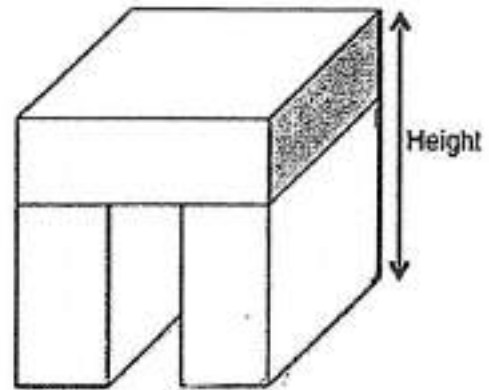
Primary 6 Math (Prelim)

2 pts

Mr Ali wanted to make a stool from a block of wood, 10 cm by 60 cm by 20 cm, as shown below. He cuts the wood into 3 parts, A, B and C in the ratio of 4 : 3 : 3.



He then nails the 2 smaller pieces to part A as shown below.



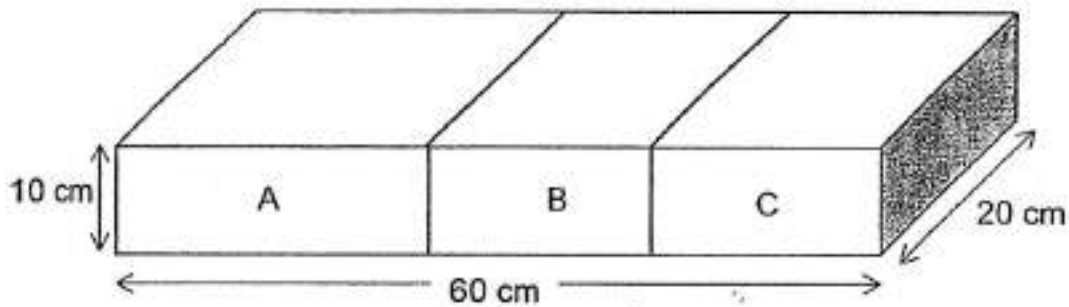
Find the height of the stool.

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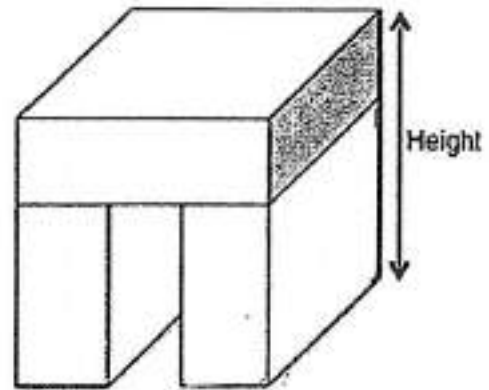
**Question 52 of 54**

Primary 6 Math (Prelim) 1 pt

Mr Ali wanted to make a stool from a block of wood, 10 cm by 60 cm by 20 cm, as shown below. He cuts the wood into 3 parts, A, B and C in the ratio of 4 : 3 : 3.



He then nails the 2 smaller pieces to part A as shown below.



What is the lowest possible height if he were to stack 5 such stools, one on top of another?

**Question 53 of 54**

Primary 6 Math (Prelim) 2 pts

There are 16 boys and 25 girls in the class. 25% of the boys and 40% of the girls wore spectacles. How many students wore spectacles?

## Question 54 of 54

Primary 6 Math (Prelim) 3 pts

The figure below shows 2 overlapping triangles, ABC and ACD. Find the area of the figure given that the area of Triangle AEC is  $15 \text{ cm}^2$ .

