FAS-PASS
Maths

PRACTICE TESTS FOR SEA MATHEMATICS

FREE TEST BOOKLET 12

TEST CODE KA2512

Name of student _____

School_____

Date_____

AUTHORS

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2025-2028 ASSESSMENT FRAMEWORK

TEST INSTRUCTIONS

You are **NOT** allowed to use **calculators in this test.**

This test has **THREE** sections with a total of 40 questions.

The entire test is worth 75 marks.

SECTION I has 20 questions (Nos. 1- 20) and is worth 20 marks.

SECTION II has 16 questions (Nos. 21- 36) and is worth 39 marks.

SECTION III has 4 questions (Nos. 37- 40) and is worth 16 marks.

Read EACH question CAREFULLY before answering it.

Show ALL working.

Marks will be given for the correct steps taken.

Answer ALL questions but do not spend too much time on any one question.

You have 75 minutes for this test.

SECTION 1(20 marks)

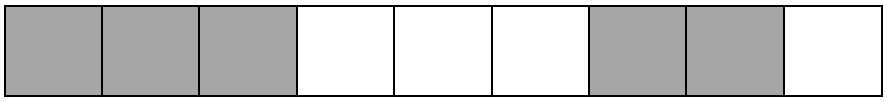
1. What numeral is represented by 4×10 000 + 0×1000 + 3×100 + 5×10 + 2×1?

Answer_____

2. State the value of the tens digit in 1 432

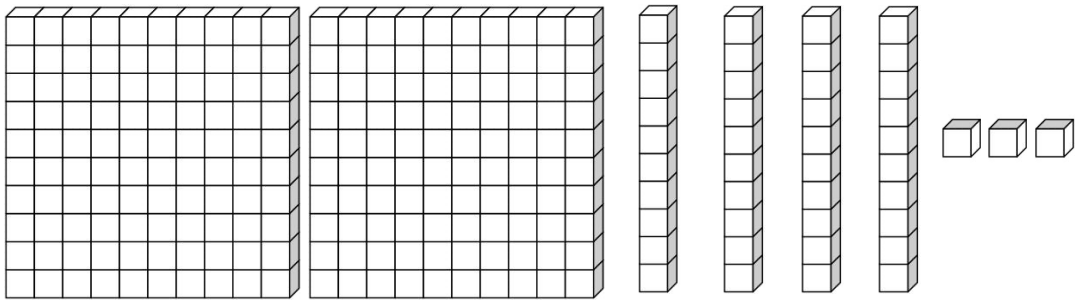
Answer_____

3. What fraction of the bar is shown shaded?



Answer_____

4. Write the numeral which represents the blocks shown in the diagram.



Answer_____

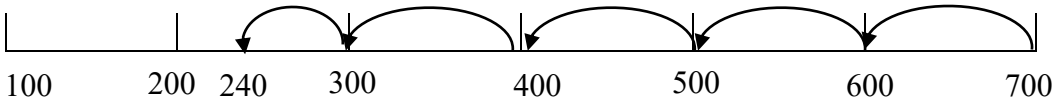
5. Express 0.04 as a fraction in its lowest terms.

Answer_____

6. By how much is 6.42 larger than 6.24?

Answer_____

7. Pedro is using a number line to perform a subtraction.



Complete the number sentence to illustrate the subtraction she is performing.

$\square - \square = 240$

8. Given that $3 \times 3 \times 3 \times 3 = ☆ \times ☆$, state the value of ☆.

Answer_____

9. How many crates holding $2\frac{1}{2}$ dozen eggs can be filled from 150 eggs?

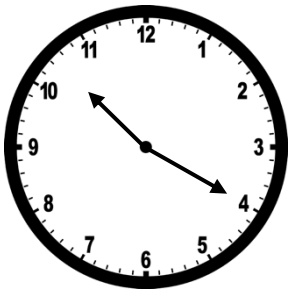
Answer_____

10. Sonya saves $22.50 in three weeks. At this rate, would she be able to purchase a chain costing $124 by the end of 16 weeks?

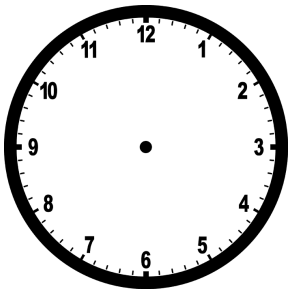
Answer_____

11. A bus leaves San Fernando for Port of Spain every 35 minutes. The departure time of the first bus is shown on one of the clocks below. Draw the hands on the other clock to show the departure time of the third bus.

First Bus



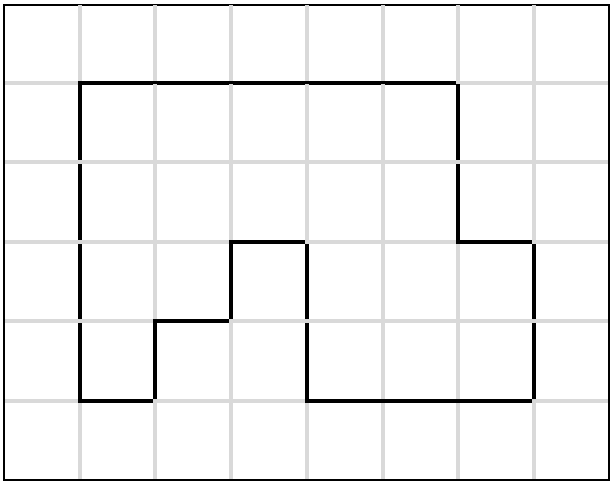
Third Bus



12. Write the symbol > or < or = in the box to make the statement true.

1450 ml ☐ $1\frac{3}{8}$ litres

13. The grid is made up of centimetres squares. Calculate the perimeter of the figure.



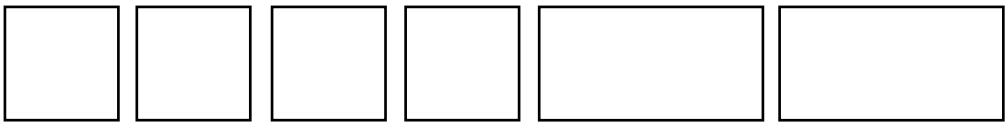
Answer_____

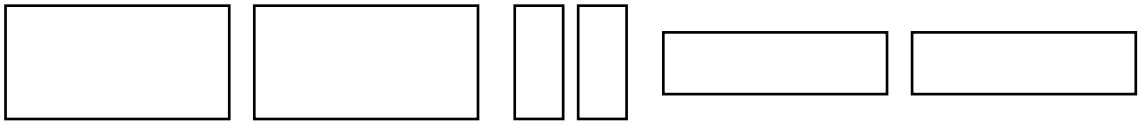
14. Three fruits weigh $3\frac{3}{4}$ kg, 3770 grams and 3.755 kg. What is the difference in mass between the heaviest and lightest fruit?

Answer_____

15. Which of the set of faces cannot form a cuboid?

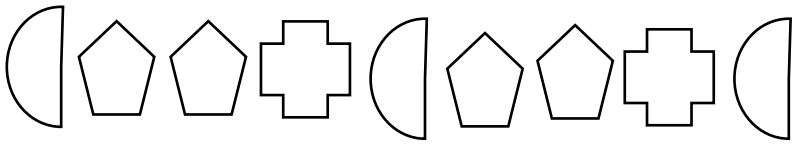
A 

B 

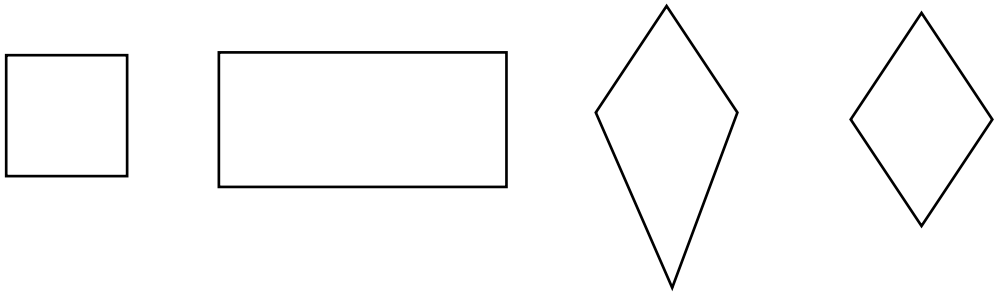
C 

Answer _____

16. Draw the next shape in the pattern.



17. Which shape is not a parallelogram?



Square Rectangle Kite Rhombus

Answer_____

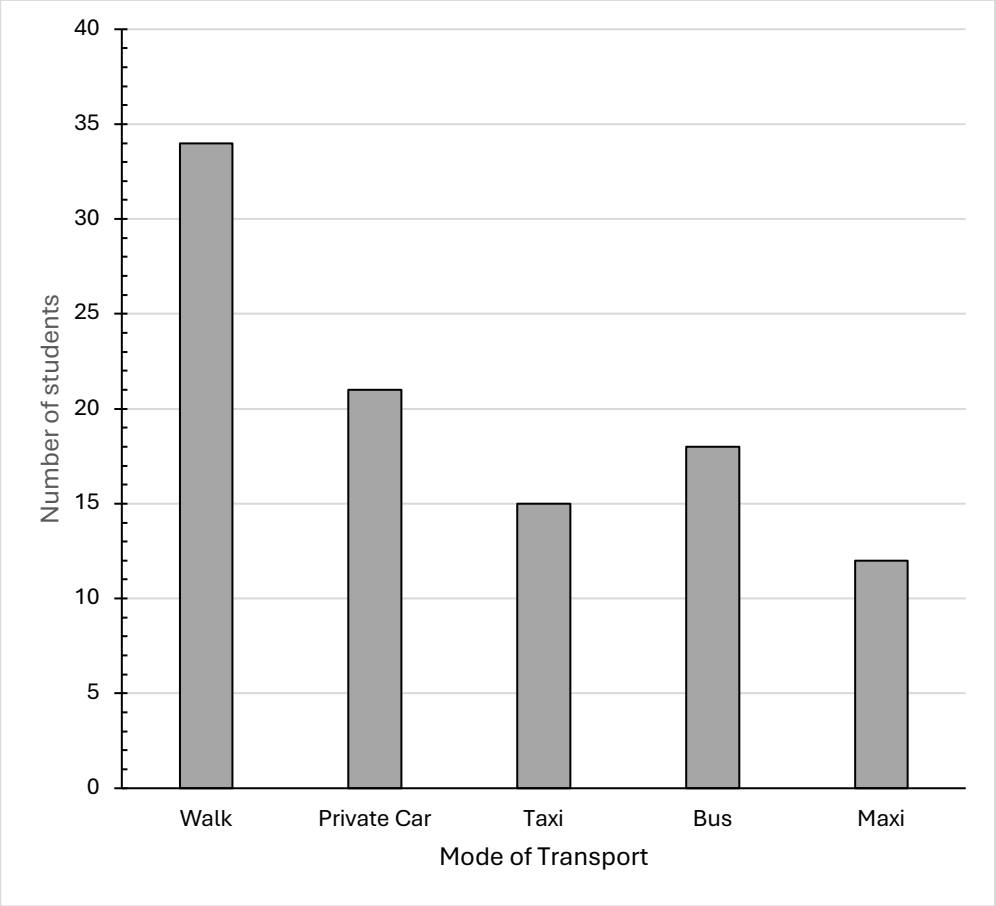
18. Andrea counted the colours of each of the cars in the school car park. The results are shown in the frequency table below.

Colour of car	Frequency
White	12
Black	17
Red	6
Blue	5

Andrea wants to make a pictograph to represent the data. If she intends to use one picture to represent one car, how many pictures must she buy?

Answer_____

19. The chart shows how a group of students arrive at school in the morning.



How many students do not walk to school?

Answer_____

20. The table shows the scores obtained by 20 students in a quiz of 5 questions.

Score	Number of students
0	4
1	3
2	6
3	4
4	2
5	1

What score represents the mode?

Answer_____

SECTION 2 (39 marks)

21. Given that

$\frac{3}{4} \times \square = 45$

Answer $\square$ = _____

(2 marks)

22. A businessman borrowed \$7 000 for 2 years. He paid simple interest at a rate of 12 % per annum. Calculate the amount that he has to repay.

Answer_____

(2 marks)

23. Which fractions lie between 1 and 2?

$\frac{9}{8} \quad \frac{7}{3} \quad \frac{5}{6} \quad \frac{7}{5}$

Answer_____

(2 marks)

24. A family of 5 went to the movies. Tickets costs $50 each , and together they bought 3 bags of popcorn at $26 per bag and 4 sodas at $3.50 each. How much does the family spend?

Answer_____

(2 marks)

25. Vashti completed a number pattern but made a mistake in calculating two values.

Term Number	1st	2nd	3rd	4th	5th	6th	7th
Value	4	5	8	13	20	28	39

Explain Vashti's mistake and determine the correct values.

Answer_____

_____

_____

(3 marks)

26. Uncle Tibbles wants to post a birthday present for his nephew and the cost of postage is $27. Stamps are priced at $1, $3 and $5. If he must use at least one of each stamp, state the least number of stamps he can use.

Answer_____

(3 marks)

27. This set of items cost $34

This set of items costs $62

How much would this set of items cost?

Answer_____

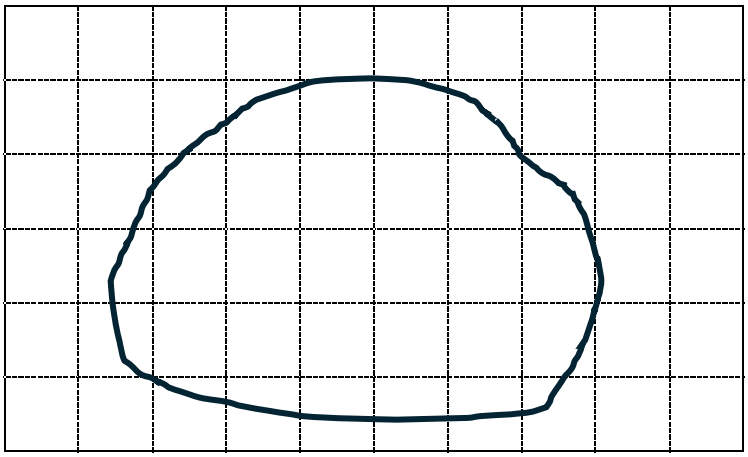
(3 marks)

28. Cindy wishes to make a necklace consisting of 63 coloured beads. The beads are arranged in a pattern so that for every 4 blue beads, she must use 3 red and 2 green beads. Cindy has 28 blue beads, 23 red beads and 12 green beads. Explain whether or not Cindy can make the necklace.

Answer_____

(3 marks)

29. A curved shape is drawn on a centimetre grid. What is the approximate area of the shape in cm^2?



Answer_____

(2 marks)

30. Kyle bought a 10 kg bag of flour. He used 1.6 kg for baking and divided the rest into 1200-gram packages. How many packages can he make?

Answer _____

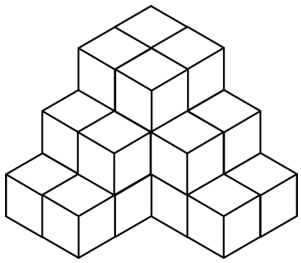
(2 marks)

31. A bus left San Fernando at 8:14 am and reached Chaguanas 32 minutes later. It stopped at Chaguanas for 15 minutes and then headed to Port of Spain, arriving 38 minutes later. At what time did the bus arrive at Port of Spain?

Answer _____

(3 marks)

32. The solid below was built from cubes of side 1 cm.

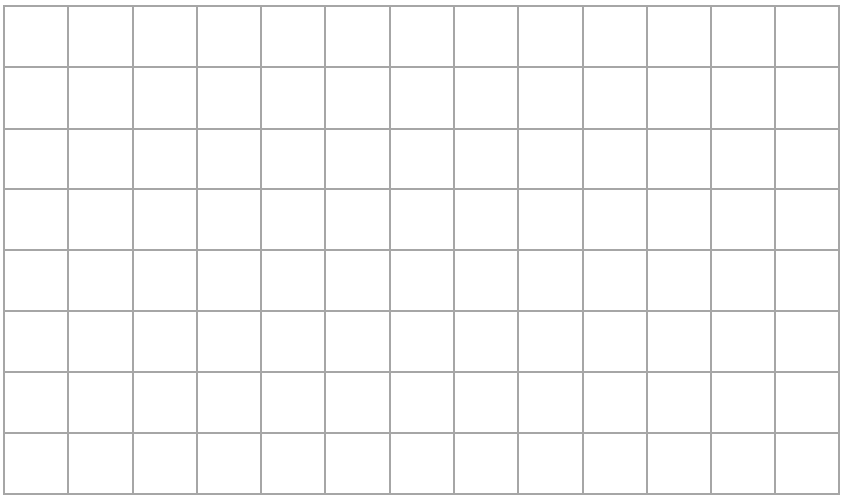


What is the volume of the solid?

Answer_____

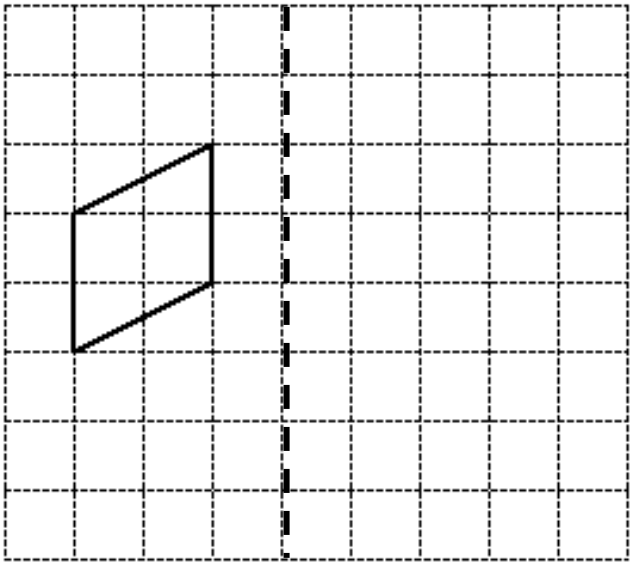
(3 marks)

33. Complete the figure to form an irregular hexagon with one pair of parallel sides.



(2 marks)

34. Using the dotted line as a mirror line, draw image of the parallelogram.



(2 marks)

35. The mean height of a group of three people is 1.7 metres. One more person joins the group and the new mean is 1.65 metres. Calculate the height of the new person.

Answer_____

(2 marks)

36. The table shows the number of tea tickets and barbecue tickets sold at a fundraising event.

	Tea tickets	Barbecue tickets
Number sold	125	145

The total money received from sale of tickets was $14 225. If the cost of a tea ticket was $50, what was the cost of a barbecue ticket?

Answer_____

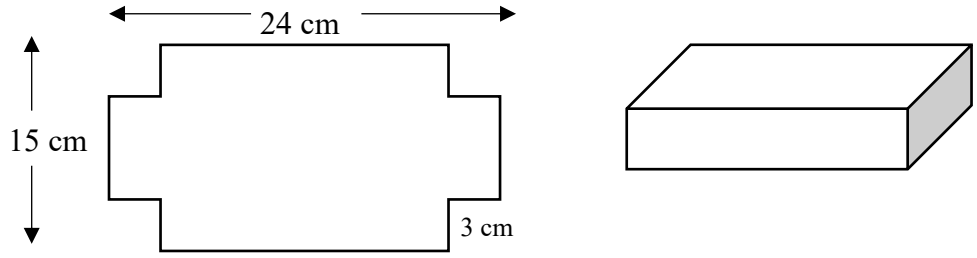
(3 marks)

SECTION 3 (16 marks)

37. In a flower garden there are 500 flower plants. On Monday, one-half of them bloomed. On each day after, one-fifth of the remainder bloomed. How many plants were not blooming at the end of Thursday?

(4 marks)

38. A rectangular-shaped metal sheet has dimensions 24 cm by 15 cm. Squares of side 3 cm are cut off from its four edges and the remaining sheet is folded to form an open box.



Calculate and record the dimensions and volume of the box.

Length (cm)	Breadth (cm)	Height (cm)	Volume (cm^3)

(4 marks)

39. The figures are made up of dots and triangles.

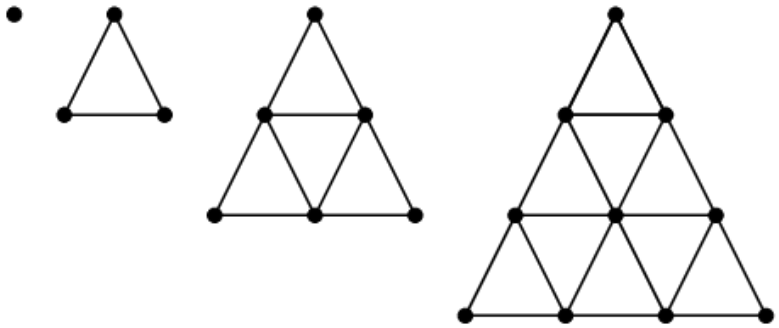


Figure 1 Figure 2 Figure 3 Figure 3

Complete the table.

Figure	Number of dots	Number of triangles
1	1	0
2	3	1
3	6	4
4		
8		

(4 marks)

40. The data shows the number of text messages sent each day by Shalimar in September.

12	25	32	16	18	36
34	21	19	27	31	29
40	22	27	32	39	15
17	20	33	27	35	32
13	18	23	24	26	29

(a) Complete the tally chart to record the data.

Number of text messages/day	Tally	Frequency
1-20		
21-30		
31-40		

(b) The phone company charges the following daily rates for text messages.

Number of text messages/day	1-20	21-30	31-40
Cost	Free	$1.10 per day	$0.95 per day

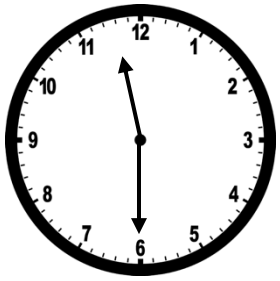
How much did Shalimar pay for text messages in September?

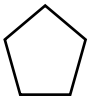
(4 marks)

END OF TEST

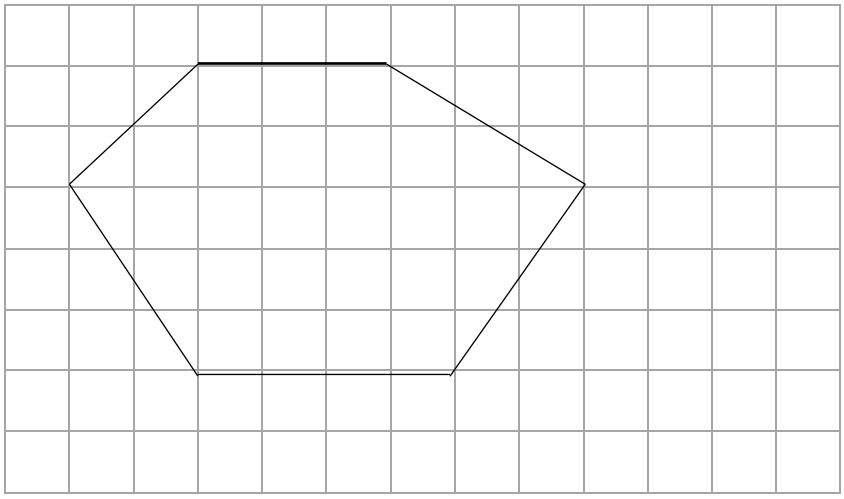
ANSWER SHEET – FREE TEST 2512

1. 40 352
2. 30
3. $\frac{5}{9}$
4. 243
5. $\frac{1}{25}$
6. 0.18
7. 700 – 460 = 240
8. 9
9. 5
10. No, she will be short by $11.50
11. Time showing 11:30



12. >
13. 24 cm
14. 20 grams
15. B
16. 
17. Kite
18. 40 pictures
19. 66 students
20. 2
21. 60

22. $8680
23. $\frac{9}{8}$ and $\frac{7}{5}$
24. $342
25. The pattern rule is adding consecutive odd numbers starting with 1, then 3, then 5, then 7 then 9. Vashti mistakenly added 8 instead of 9 to 20 and got 28 instead of 29. Although she correctly added 11 to the 6th term, her answer was incorrect because of her initial mistake. So, the 6th term should be 20+9=29 and the 7th term should be 29+11=40.
26. 7 stamps, 4 @$5, 2 @$3, 1@$1
27. 48
28. No, she has the correct number of blue and 2 extra in green but two less in red.
29. 23-25 cm^2
30. 7
31. 9:39 am
32. 24 cm^3
33.



34. The set with 4 squares and one rectangle
35. 1.5 metres
36. $55
37. 128
38. L = 18 cm, Breadth = 9 cm, Height = 3cm, Volume = 486 cm^3
39. Figure 4 : Number of dots = 1+2+3+4= 10, Number of triangles = 9 (pattern of square numbers)

Number of dots = 1+2+3+4+5+6+7+8 = 36. Number of triangles (*Figure Number* –1)^2= $(8-1)^2 = 49$

Figure	Number of dots	Number of triangles
1	1	0
2	3	1
3	6	4
4	10	9
8	36	49

40. (a)

Number of text messages	Tally	Frequency
1-20		9
21-30		11
31-40		10

(b) On the 9 days when her messages were less than 20, there were no charges.

11 messages @\$1.10 = \$12.10

10 messages @\$0.95 = \$9.50

Total = \$21.60