STIRLING TUITION

SEAG
Entrance Assessment

ST

S T I R L I N G   T U I T I O N
W W W . S T I R L I N G T U I T I O N . C O M

Practice Paper 18

(Cut Answer Sheet from Back Page)

English – Practice Test

In this question there is either **one** punctuation mistake or **no** punctuation mistake. Find the group of words with the mistake in it and mark its letter on your answer sheet. **If there is no mistake, mark N**.

No comma needed

P1   Joe is a big robot, fan. He has an enormous collection which is displayed in his room.

      (A)   B   C   D

In this question you have to choose the **best** word to complete the sentence, so that it makes sense and is written in correct English. Choose the **best** answer and mark its letter on your answer sheet.

P2   I gave my brother a | big | | small | | head | | first | | foot |
                            A   B   C   D   E

      start in the race because he is younger than me.

In this question there is either **one** spelling mistake or **no** spelling mistake. Find the group of words with the mistake in it and mark its letter on your answer sheet. **If there is no mistake, mark N.**

P3   His birthday is on the 25th of December so he chose to celebrate it a week earlier.

         A   B   C   D

      N

Read this passage to yourself.

Extract from The Phantom Vessel from A Chinese Wonder Book by Norman Hinsdale Pitman

The winter had been a hard one: extreme cold, deep snow, and violent winds. The Wang house had suffered greatly. The roof had fallen in, weighed down by heavy snow. Then a hurricane had blown a wall over, and Ming-li, the son, up all night and exposed to a bitter cold wind, had caught pneumonia. Long days of illness followed, with the spending of extra money for medicine. All their scant savings had soon melted away, and at the shop where Ming-li had been employed his place was filled by another. P 4

Answer this question. Choose **one** answer from the options below and mark its letter on your answer sheet.

P4
Which of the following is true about the crocodile?

A Their house went on fire.
B The mother caught pneumonia.
C Ming-li earned some extra money at the shop.
D Ming-li lost his job.
E Their house was blown down by a tornado.

For this question, you have to write your answer in the box provided on your answer sheet (box P5).

P5
**Which one word from the passage means the same as "sickness"?**

illness

END OF ENGLISH PRACTICE TEST
Do not turn over until you are told to do so ⚠

Maths – Practice Test

P6

What is 9:56 pm as a 24-hour clock time?

$+12$

$21:56$

A 9:56am   B 20:26   (C 21:56)   D 09:56   E 9:56

P7

The diagram below shows the plan of a garden. The length of the garden is 4 m and the width of the garden is 6.25 m. The shaded region is a play area of length 2 m and width 3.5 m. The rest of the garden is grass.

| Play Area | 2m |
| 3.5m | |

Garden   4m

6.25m

6.25
$\times 4$
25.00

3.5
$\times 2$
7.0

25
$- 7$
18
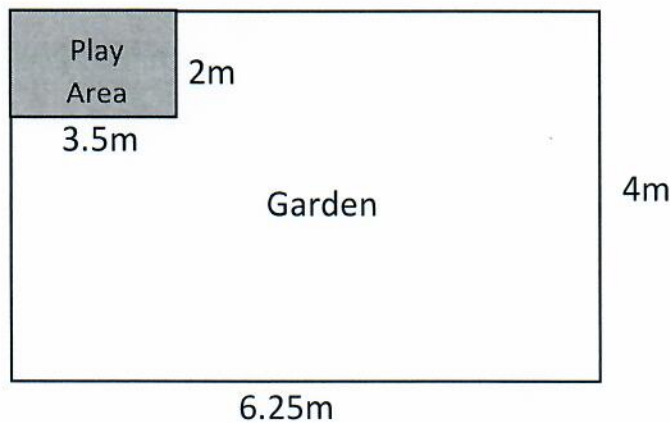
What is the total area of the garden, not including the play area?

A 7m²   B 24m²   (C 18m²)   D 25m²   E 14m²

P8

largest

Look at the numbers below.

smallest

(0.920)	0.321	0.640	(0.129)	0.400
920	321	640	129	400

$$\begin{array}{r} 0.920 \\ +0.129 \\ \hline 1.049 \end{array}$$

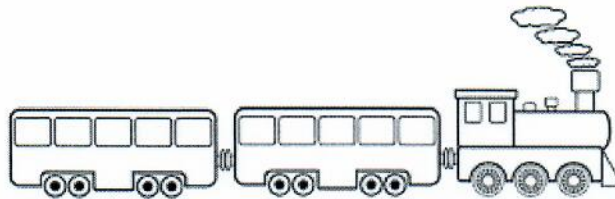**What is the sum of the smallest number and the largest number?**

A 0.721   B 1.04   C 0.961   D 0.45   (E 1.049)

For these questions you have to **write your answers** in the boxes provided on your answer sheet (box P9 and P10). The units of measurement have been given.

P9

$$\begin{array}{r} 9\ ^{5} \\ 0\,\cancel{10}:\cancel{60} \\ -\ 9:54 \\ \hline 00:06 \end{array}$$

A commuter in Bangor wants to catch a train to Belfast. The first train to Belfast leaves Bangor at 6:20am. After the first train, trains leave every 10 minutes. The commuter goes to the train station at 9:54am.

What is the least time he must wait for a train to Belfast?

$\boxed{6\ minutes}$

P10

What is 89 millimetres in metres?

$1m = 1000mm$ (÷)

0.089 $\div 1000 =$

$\boxed{0.089m}$

END OF MATHS PRACTICE TEST
Do not turn over until you are told to do so ⚠️

English – Main Test

In this exercise there are some mistakes with **punctuation** or use of **capital letters**. On each numbered line there is either **one** mistake or **no** mistake. Find the group of words with the mistake in it and **mark its letter on your answer sheet. If there is no mistake, mark N.**

Punctuation Exercise

1 My two sisters (Chloe and Sophie) can't stand having to share a bedroom.

A   B   C   D   *N*

No apostrophe

2 I tried to teach my dog some tricks but all it wants to do is run around and chase it's tail.

A   B   C   *(D)*

Comma missing

3 To build the bookcase you need a screwdriver, screws glue and the instructions.

A   B   *(C)*   D

Question Mark

4 "Who are the flowers for," she asked. "For you, of course," he replied.

A   *(B)*   C   D

Missing Capital

5 Kruger National Park in south Africa is a popular destination for safari holidays.

A   *(B)*   C   D

In this exercise you have to choose the **best** word, or **group of words**, to complete each numbered line so that the passage makes sense and is written in correct English. Choose the best answer and **mark its letter on your answer sheet**.

Grammar Exercise

6

I was so thirsty I drink | will drink | drank | drinked | drinks

A   B   C   D   E

three bottles of water.

7

He cracked the eggs into a bowl and then mixed them

in | with | over | on | around a spoon.

A   B   C   D   E

8

I was so nervous before the concert. I felt like I had butterflies in my

hair | throat | brain | clothes | tummy .

A   B   C   D   E

9

The school choir has been learning a new song which

they | them | he | you | I will perform at the Spring Concert.

A   B   C   D   E

10

She is not allowed to watch television

next | until | first | suddenly | later she finishes her homework.

A   B   C   D   E

In this exercise there are some **spelling** mistakes. On each numbered line there is either **one** mistake or **no** mistake. Find the group of words with the mistake in it and **mark its letter on your answer sheet. If there is no mistake, mark N.**

Spelling Exercise

competition

11 After announcing the winner of the compitition, the judges handed out the prizes.

    A   B   (C)   D

incredible

12 This book is the incredable story of how a poor young man became a millionaire.

    A   (B)   C   D

temperature

13 I won't be at work today because I have a sore throat and a high temperture.

    A   B   C   (D)

average

14 The class avrage for the test was only forty percent which was very disappointing.

    (A)   B   C   D

monkeys

15 I had a great time at the zoo but my favourite part of the day was seeing the monkies.

    A   B   C   (D)

Read the **whole** passage carefully, then answer the questions that follow.

Extract from The Phantom Vessel from A Chinese Wonder Book by Norman Hinsdale Pitman

1. "Yes, you are the lad I'm looking for," he said at last, speaking in a piping voice that
2. almost made Ying-lo smile. "You are Ying-lo, and you are the only one left of this
3. wretched company." This he said, pointing towards the bodies lying here and there about
4. the deck.

5. Although he saw that the old man meant him no harm, the child could say nothing, but
6. waited in silence, wondering what would happen next. [...]

7. The newcomer walked slowly towards the mast and tapped on it three times with an iron
8. staff he had been using as a cane. Immediately the sails spread, the vessel righted itself
9. and began to glide over the sea so fast that the gulls were soon left far behind, while the
10. threatening rocks upon which the ship had been so nearly dashed seemed like specks in
11. the distance.

12. "Do you remember me?" said the stranger, suddenly turning and coming up to Ying-lo,
13. but his voice was lost in the whistling of the wind, and the boy knew only by the moving
14. of his lips that the old man was talking. The greybeard bent over until his mouth was at
15. Ying-lo's ear: "Did you ever see me before?"

16. With a puzzled look, at first the child shook his head. Then as he gazed more closely
17. there seemed to be something that he recognized about the wrinkled face. "Yes, I think
18. so, but I don't know when."

19. With a tap of his staff the fairy stopped the blowing of the wind, and then spoke once
20. more to his small companion: "One year ago I passed through your village. I was dressed
21. in rags, and was begging my way along the street, trying to find someone who would feel
22. sorry for me. Alas! no one answered my cry for mercy. Not a crust was thrown into my
23. bowl. All the people were deaf, and fierce dogs drove me from door to door. Finally
24. when I was almost dying of hunger, I began to feel that here was a village without one
25. good person in it. Just then you saw my suffering, ran into the house, and brought me out
26. food. Your heartless mother saw you doing this and beat you cruelly. Do you remember
27. now, my child?"

28. "Yes, I remember," he answered sadly, "and that mother is now lying dead. Alas! all,

29. all are dead, my father and my brothers also. Not one is left of my family."

30. "Little did you know, my boy, to whom you were giving food that day. You took me

31. for a lowly beggar, but, behold, it was not a poor man that you fed, for I am Iron

32. Staff. You must have heard of me when they were telling of the fairies in the Western

33. Heaven, and of their adventures here on earth."

34. "Yes, yes," answered Ying-lo, trembling half with fear and half with joy, "indeed I

35. have heard of you many, many times, and all the people love you for your kind

36. deeds of mercy." (18)

37. "Alas! they did not show their love, my little one. Surely you know that if any one (19)

38. wishes to reward the fairies for their mercies, he must begin to do deeds of the same

39. kind himself. No one but you in all your village had pity on me in my rags. If they had

40. known that I was Iron Staff, everything would have been different; they would have (19)

41. given me a feast and begged for my protection.

42. "The only love that loves aright   A AA

43. Is that which loves in every plight.

(21) 44. The beggar in his sad array   B BB

45. Is moulded of the self-same clay.

46. "Who knows a man by what he wears,   AA

47. By what he says or by his prayers?

48. Hidden beneath that wrinkled skin   BB

49. A fairy may reside within.

50. "Then treat with kindness and with love   AA

51. The lowly man, the god above?

52. A friendly nod, a welcome smile—

53. For love is ever worth the while."   BB

Please answer these questions. (Look at the passage again if you need to.) You should
choose the **best** answer and mark its letter on your answer sheet.

16

Where does the action of the story take place?

A   in the sea
B   in a dream
C   on a boat
D   in fairyland
E   in a village

17

Look at lines 12 – 15. Why can't Ying-lo hear the old man?

A   The old man is speaking in a different language.
B   The old man is whispering.
C   The old man is moving his lips but making no sound.
D   The loud wind means he can't hear the old man.
E   Ying-lo is deaf.

18

Look at lines 34 – 36. What does this suggest about Iron Staff?

A   He is powerful and kind.
B   He is scary.
C   He is joyful.
D   He is unknown.
E   He is disliked.

19

Look at lines 37 – 41. What does this suggest about the people in the village?

A   They don't like strangers.
B   They don't like Iron Staff.
C   They don't like fairies.
D   They need protection.
E   They are unkind and selfish.

20

Look at the poem at the end of the passage (lines 42 – 53).
What is the rhyme scheme of the poem?

A   A B A B
B   A A B B
C   A B C D
D   A B C C
E   A A A B

21

"The beggar in his sad array

Is moulded of the self-same clay." (lines 44 – 45)
This is a metaphor. What is the meaning of the metaphor as it appears in the poem?

A   The beggar is made of clay.
B   The beggar makes things from clay.
C   The beggar is human just like anyone else.
D   The beggar's clothes are covered in clay.
E   The beggar is less important than other people.

22

Based on everything you have read in the passage and the poem, what is the moral of this story?

A   Fairies often travel in disguise.
B   Everyone is unkind and selfish.
C   Fairies are powerful and kind.
D   If you are poor then nobody will like you.
E   Treat everyone the same with kindness and love.

For these questions you have to **write your answers**, neatly, in the boxes provided on your answer sheet.

23

What did the old man do to make the boat glide over the sea?

tapped mast three times

24

What colour is the old man's beard?

Grey

25   When did the old man visit Ying-lo's village?

One year ago

26   Which word in line 16 means the same as "confused"?

puzzled

27   Which part of speech is "cry" as it appears in the passage? (line 22)

Noun

28   Which one part of speech are the following as they appear in the passage?

towards (line 3)   with (line 7)   over (line 9)   at (line 14)

prepositions

Maths – Main Test

29

A bride is cutting up her cakes at her wedding to give to the guests. The bride cuts each cake into eighths.

How many eighths can 8 cakes be cut into?

(A 64)   B 1   C 16   D 512   E 88

1 cake = 8 pieces or 8 eighths

$8 \times 8 = 64$

30

$$6.\overset{4}{\cancel{5}}\overset{1}{2}$$
$$-\ 6.06$$
$$\overline{£0.46}$$

£0.31
0.25
0.64
0.71
1.03
0.98
+ 2.14
$\overline{£6.06}$
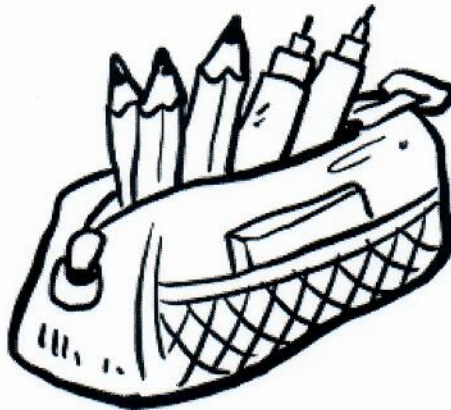
Each week Gemma saves some of her pocket money to buy a new pencil case which costs £6.52. Below are the amounts she saved over seven weeks.

£0.31   £0.25   £0.64   £0.71   £1.03   £0.98   £2.14

At the end of the seven weeks, how much money does she need to add to her savings to buy the pencil case?

A £0.37   B £0.52   (C £0.46)   D £0.67   E £0.29

31

Look at the diagram below. The lengths of three sides are written on the diagram. Another side is of length x. The diagram has an area of 25 cm².

$11 cm^2$

2cm

7cm

7×2

$(14 cm^2)$

X cm

2cm

$\begin{array}{r} 2\ 5 \\ -\ 1\ 4 \\ \hline 1\ 1 \end{array}$

$x \times 2 = 11$

$\begin{array}{r} 5.5 cm \\ 2\overline{)11.0} \end{array}$
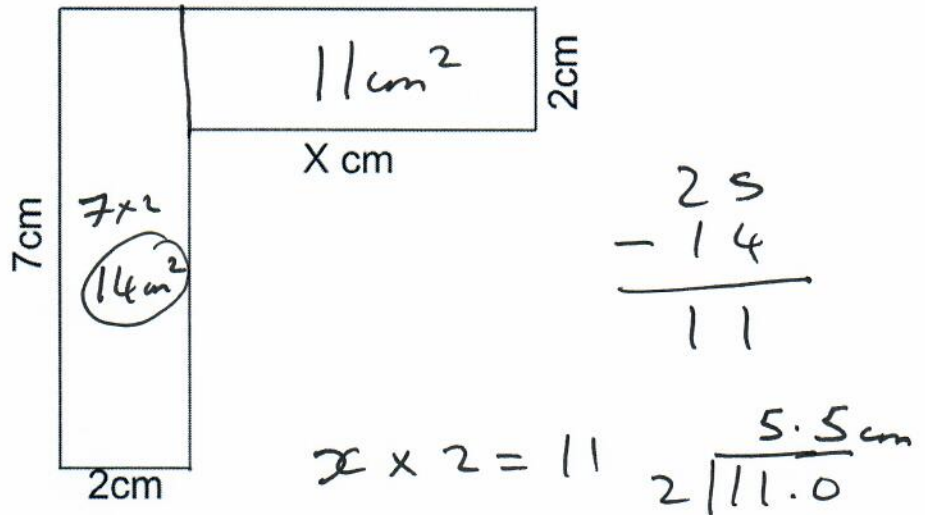
What is the length of X?

A 6cm   B 5.5cm   C 7cm   D 6.5cm   E 5cm

32

In a game with 2D shapes, triangles, rectangles and pentagons are scattered on a table so that none of the shapes touch.

$8 \times 3 = (24)$ $7 \times 4 = (28)$

How many sides in total do eight triangles, seven rectangles and four pentagons have?

$4 \times 5 = (20)$

A 24   B 52   C 76   D 28   E 72

$\begin{array}{r} 28 \\ 24 \\ +\ 20 \\ \hline 7\ 2 \end{array}$

33

Two angles in a triangle are 178° and 1°.

(handwritten: 178 + 1 = 179; 180 − 179 = 1; box showing 178° | 1° | 1°, "same")

Using the information above what type of triangle is this?
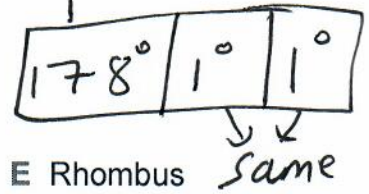
A Right Angle   B Scalene   C Equilateral   **(D Isosceles)**   E Rhombus

---

34

A teacher is making a classroom display using 5 identical rectangular pages. They staple the 5 pages to the display board to make a rectangle ABCD as shown below. Each page is 32 cm wide. They place the pages so that there are 4 overlaps of 4 cm each.

A   1   2   3   4   B

D   32 cm   4 cm   C

(handwritten: 32 × 5 = 160 (without overlaps); 4 × 4 = 16 (overlaps); 160 − 16 = 144)
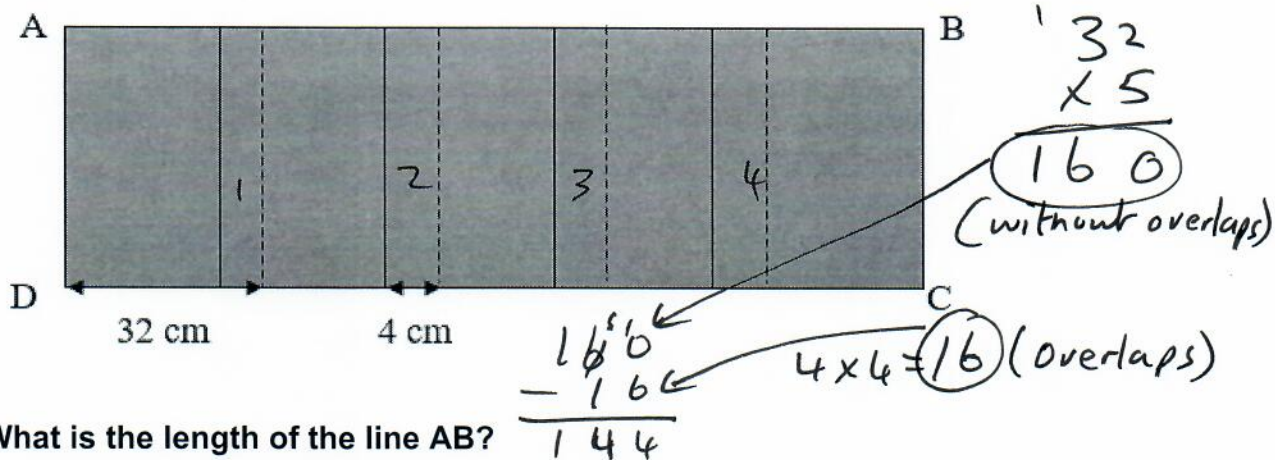
What is the length of the line AB?

(A 144cm)   B 112cm   C 160cm   D 122cm   E 176cm

35

(handwritten: −12°C +6 (−6°C) +6 0°C)

The temperature of a freezer is -12°C. It is switched off. Six hours later the temperature has risen by 6°C.
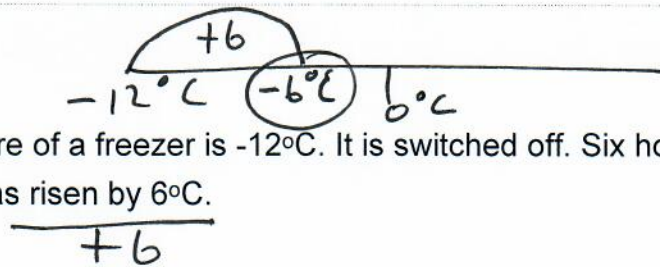
What is the temperature of the freezer six hours after it is switched off?

A 6°C   B 12°C   **(C -6°C)**   D 8°C   E -18°C

36

A number is missing from the statement below.

$$\div 3$$
$$\div 3$$

If 21 ÷ G = 6 then 7 ÷ G = ___2___

or

$$6 \overline{)21.^30}$$ $$03.5$$

$$G = 3.5$$

$$3.5 \overline{)7}$$ $$2$$

What number must be inserted in the space above to make the statement correct?

A 42   (B 2)   C 6   D 18   E 3

37

What is 3 hours 42 mins before midnight?

A 19:42   B 18:18   C 11:57   D 03:42   (E 20:18)

$$\begin{array}{r} 11^{+6}5 \\ 12:\cancel{6}\cancel{6} \\ - 3:42 \\ \hline 8:18pm \\ +12 \end{array}$$

20:18

38

A child goes to the butterfly garden in Castle Espie and sees 40 butterflies. They notice that 22 of the butterflies are red.

What percentage of the butterflies they see are not red?

$$\begin{array}{r} 3\cancel{4}^10 \\ -22 \\ \hline 18 \end{array}$$

A 65%   B 35%   (C 45%)   D 55%   E 40%

$$\frac{18}{40} \begin{array}{c} \div 2 \\ = \\ \div 2 \end{array} \frac{9}{20} \begin{array}{c} \times 5 \\ = \\ \times 5 \end{array} \frac{45}{100} = 45\%.$$

Please go onto the next page >>>

39

A pupil brings 35 photos of her family into school. Each photo has one member of her family. There are:

Mother = 12
Father = 5
Brother = 2
Sister = 1
Grandmother = 8
Grandfather = 7

The pupil picks a photo at random. Look at the five outcomes below:

Outcome A: The photo is not of father. $\frac{30}{35}$

Outcome B: The photo is of brother. $\frac{2}{35}$

Outcome C: The photo is of grandmother or of mother. $\frac{20}{35}$

Outcome D: The photo is of grandfather. $\frac{7}{20}$

Outcome E: The photo is not of sister or of grandfather. $\frac{27}{30}$

$\begin{array}{r} 3'5 \\ -\ 8 \\ \hline 27 \end{array}$

Which of the outcomes above it most likely to occur?

A A
B B
C C
D D
E E

40

You may find the grid below useful in solving this question. Two corners of a right-angled triangle have coordinates (3, 3) and (6, 5). Look at the five statements below.
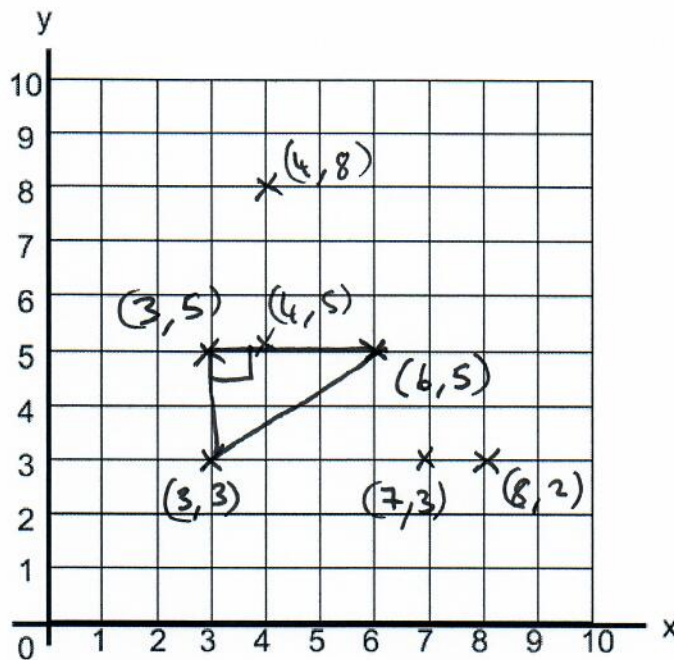
A. The third corner could have coordinates (4, 8) ✗

B. The third corner could have coordinates (3, 5) ✓

C. The third corner could have coordinates (8, 2) ✗

D. The third corner could have coordinates (4, 5) ✗

E. The third corner could have coordinates (7, 3) ✗

Which of the above statements is true?

A A   B B   C C   D D   E E

41

A packet of pens contains 7 pens. A box contains 12 packets of pens. A crate contains 6 boxes.

How many pens are there in a crate?

A 72   B 462   C 84   D 25   E 504

$$7 \times 12 = 84$$
$$84 \times 6 = 504$$
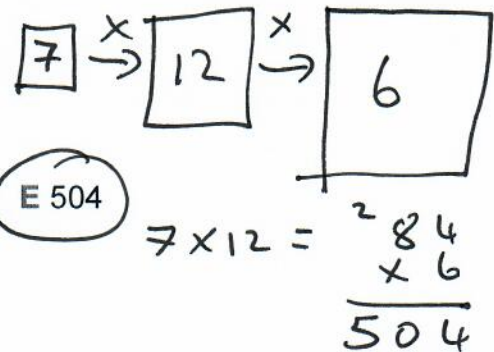
42

Look at the patterns below. They are formed from square tiles. The length of one side of a square tile is 2 cm.

(handwritten: 1, 2, 3, 4 with 12 +8 20 +8 28 +8 36)

Pattern 1 — labels: 4, 2, 6, 8, 12, 10

Pattern 2 — labels: 2, 4, 6, 8, 2°, 18, 16, 10, 14, 12

Pattern 3 — labels: 2, 4, 8, 26, 24, 22, 10, 12, 14, 20, 18, 16, 28
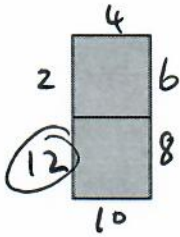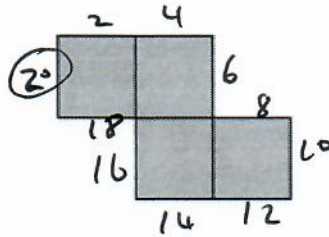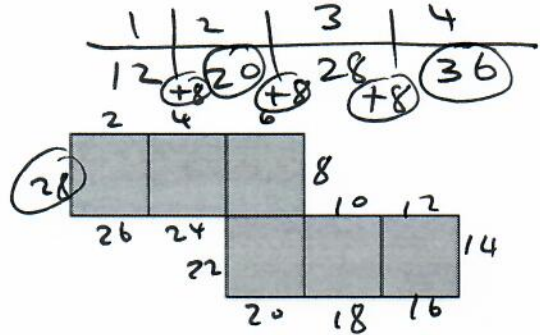
Pattern 1   Pattern 2   Pattern 3

How much longer is the perimeter of pattern 4 than that of pattern 2?

(handwritten: 36, 20, 36 − 20 = 16)

A 20cm   B 8cm   C 36cm   D 28cm   (E 16cm)

43

(handwritten: ×4, ×2, 3cm, 3cm, 3cm, 15 cm, ×5)

12 cm

6 cm
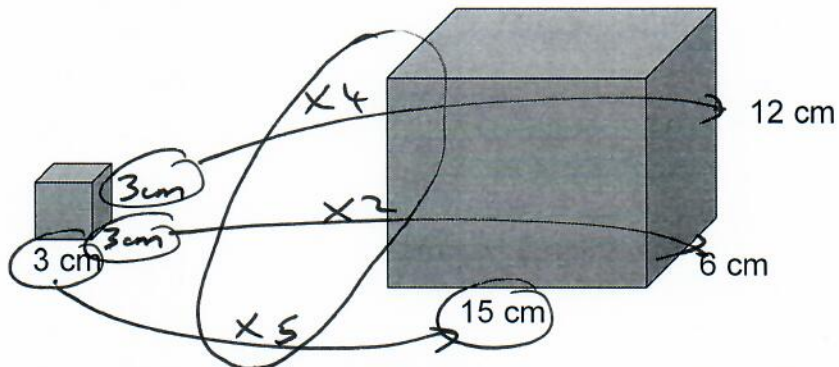
A box is the shape of a cuboid. It measures 6cm by 12cm by 15cm. The box is to be completely filled with small cubes. Each small cube has a side length of 3cm.

How many small cubes will completely fill the box?

(handwritten: 4 × 2 × 5 = 40)

or

A 1080   B 9   (C 40)   D 90   E 27

(handwritten: 3 × 3 × 3 = 27 cm³)

(handwritten: 15 × 6 = 90 × 12 = 1080 cm³)

(handwritten: ÷27, ÷3, ÷9)

(handwritten long division: 40, 9⟌0 360, 3⟌1080)

44

In the diagram below the shaded squares make up part of the net of a cube. One square of the net is missing. The diagram also has four unshaded squares labelled A, B, C, D and E.
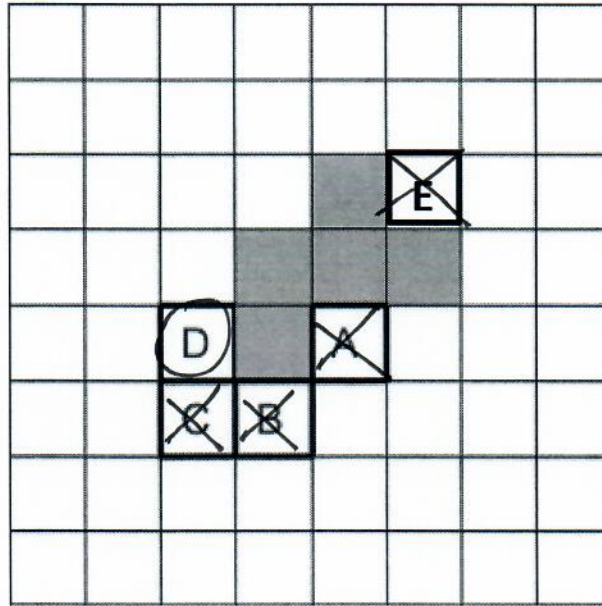
Which of the five unshaded squares should be shaded to complete the net?

A   A

B   B

C   C

D   D

E   E

45

Each edge of a cube has a length of 5 cm.

What is the total surface area of the cube?

A 25cm²   B 150cm²   C 100cm²   D 60cm²   E 125cm²

(handwritten annotations: 5cm, 25cm², 5cm, 5×5=25, 6 sides, 25 × 6 = 150)

46

Seth picks flowers and counts the number of petals on ten flowers. Five flowers have 30 petals each and the others have 18 petals each.

$5 \times 30 = 150$

What is the mean (average) number of petals on the flowers?

$5 \times 18 = 90$

A 24   B 30   C 28   D 21   E 150

(30) (30) (30) (30) (30) | (18) (18) (18) (18) (18)
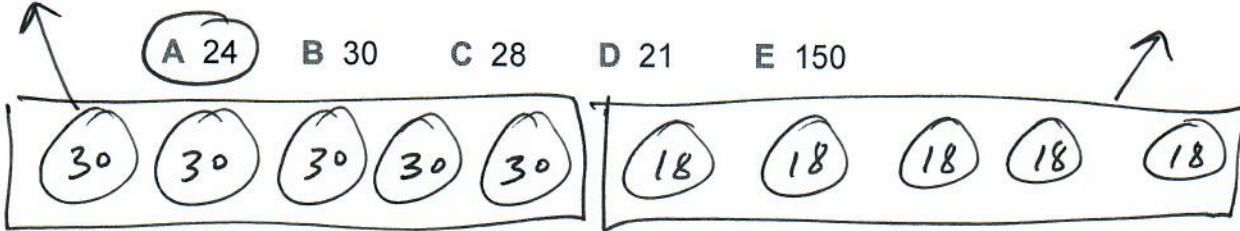
47

It costs £8000 to build four kilometres of pavement.

4000m

How much would it cost to build 250 m of the same pavement?

A £1000   B £500   C £250   D £750   E £800

48

The area of the rectangle below is 273 cm². The length of one side of the rectangle is 13 cm and the length of the other side is x cm.

13 cm

x cm
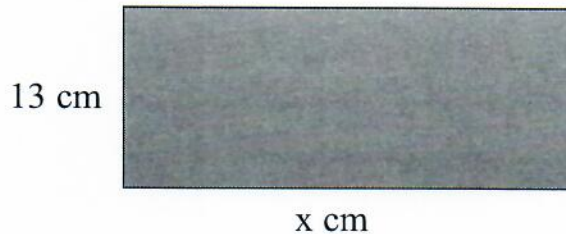
What is the value of x?

A 13cm   B 23cm   C 19cm   D 21cm   E 27cm

49

A pupil wants to work out the exact value of

$28 \times 12 \div 6 = 56$

The pupil estimates the answer by calculating

$30 \times 10 \div 5 = 60 \quad 30 \times 10 = 300 \quad 5\overline{)300}$

How much larger or smaller is the pupils estimate than the exact value?

A 336   (B 4)   C 60   D 6   E 56

handwritten working:
```
 '28
 x 12
  56
2,8 0
 336
```
```
  056
6)33³6
```
```
  060
5)3³00
```
```
 5⁵6'0
- 5 6
  0 4
```

50

A brother and sister each write a list of numbers.

The brother starts with the number 12 and writes the multiples of 12.

The sister starts with the number 8 and writes the multiples of 8.

What is the largest number below 80 to appear in both lists?
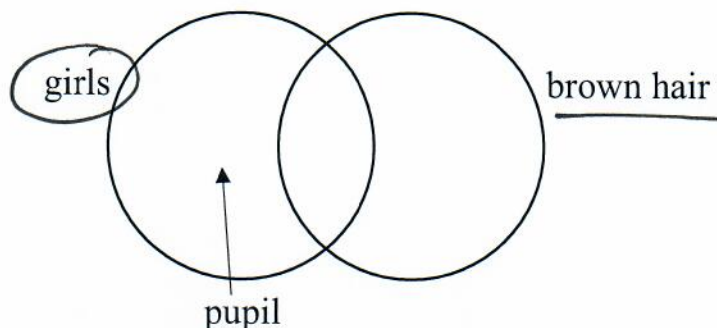
A 48   B 64   C 24   D 6   (E 72)
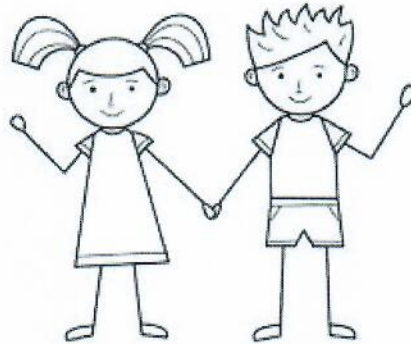
handwritten working:
```
x12        x8
12         8
24         16
36         24
48         32
60         40
72         48
           56
           64
           72
```

For questions 51–56, you have to **write your answers** in the boxes provided on your answer sheet. The units of measurement have been given.

51

A pupil draws a Venn diagram. It shows two sets: the set of girls and the set of children with brown hair.

The pupil has included themselves in the Venn diagram in the section indicated by the arrow.

A. The pupil is a girl with brown hair.
B. The pupil is a boy with brown hair.
C. The pupil is a girl without brown hair.
D. The pupil is a boy without brown hair.

Which statement above does the Venn diagram relate to?
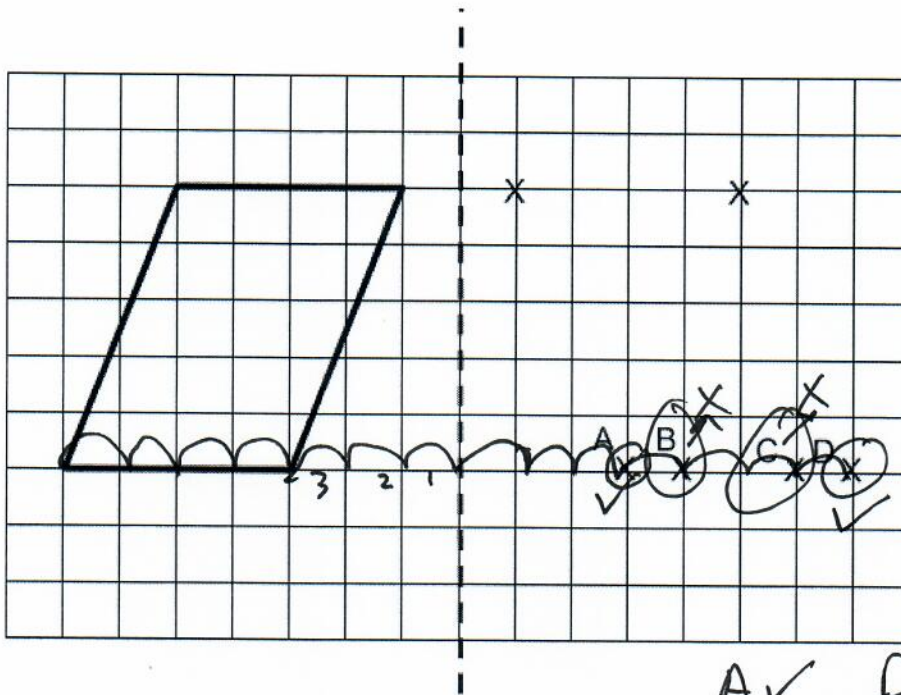
C

52
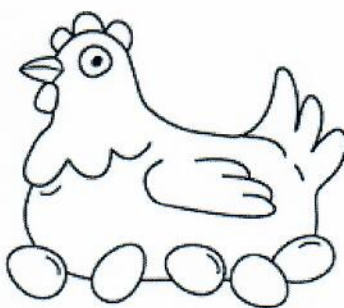
A chicken coup produces 742 eggs. The eggs are put into boxes. Each full box contains 9 eggs.

How many full boxes are there? How many eggs are left over?

82 boxes   4 eggs leftover

53

Look at the diagram below. It shows a parallelogram, a dotted line and four points, A, B, C and D.

The parallelogram is reflected in the dotted line.

A ✓   D ✓
B ✗   C ✗

Which of the two points are not the corners of the reflected parallelogram?
(Select the correct answers by writing A, B, C or D)

B and C

54

Look at the **Carroll Diagram** below. It has four boxes. A pupil has been given the task of writing whole numbers in the Carroll Diagram. You can see that the pupil has already written the number **4** in one of the four boxes of the Carroll Diagram.

	Even	Not Even
Square	4	81 = 9×9
Not Square		27

a) In which box should the pupil write the number 27? (Write 27 in the correct box.)

b) In which box should the pupil write the number 81? (Write 81 in the correct box.)

55

Look at the rule below:

Divide the previous number by 2 and then add 6.

8
11
11·5

$\div 2$ 4
5·5
6·75

$+6$ 10
11·5
11·75

Max uses this rule to write a sequence of 5 numbers. The first number Max writes is 8. The third number he writes is 11.

8 ___ 10 ___ 11 ___ 11·5 ___ 11·75 ___

What are the missing three numbers from the sequence above?

56

Angle x is 90°. Angle y is less than 90°.

One of the four statements below is true.

a. x + y is always an acute angle. ✗ less than 90°

b. x + y is always a reflex angle. ✗ more than 180° less than 360°

c. x + y is always an obtuse angle. ✓ more than 90° less than 180°

d. x + y can sometimes be an acute angle. ✗ less than 90°

e. x + y can sometimes be a reflex angle. ✗ more than 180° less than 360°

f. x + y can never be an obtuse angle. ✗ more than 90° less than 180°

Which statement above is true?

C

END OF TEST