KASLER

Kastelan & Samways Learning & Educational Resources

PRACTICE PAPER 1 SCHOOL CERTIFICATE TEST

MATHEMATICS

SECTION 1

General Test Instructions

- Preparation time: 5 minutes
- Working time: 2 hours
- The supervisor will tell you when to begin the test
- This test has TWO sections
- Attempt ALL questions
- There will be a short break between Section 1 and Section 2
- Calculators may be used in Section 2 only
- The Sample Questions & Formulae Booklet may be used in both sections

Directions for Section 1

1 You have 30 minutes to answer Section 1

2 Section 1 Questions 1-25 (25 marks)

3 Calculators are NOT to be used in Section 1

4 • Complete your answers to Questions 1–12 on Section 1 – Answer Sheet 1

5 • Complete your answers to Questions 13–25 on Section 1 – Answer Sheet 1

Complete your answers to Questions 1–12 on Section 1 – Answer Sheet 1.

1 $5 \times 4 + 3 \times 10 =$

(A) 33 (B) 50 (C) 230 (D) 350

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2 Write 38 267 to the nearest ten.

(A) 38 000 (B) 38 260 (C) 38 270 (D) 40 000

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3 $5 + \frac{6}{10} =$

(A) 0·506 (B) 0·56 (C) 5·06 (D) 5·6

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4 5410 divided by 91 is about

(A) 0·6 (B) 6 (C) 60 (D) 600

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5 Find 2·5% of 400

(A) 1·125 (B) 10 (C) 250 (D) 1000

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6 Which decimal is closest to 6·25

(A) 6·24 (B) 6·255 (C) 6·26 (D) 6·3

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7 A whole number whose square root is between 7 and 8 is:

(A) 7·5 (B) 54 (C) 65 (D) 81

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8 Michael has a video that lasts 115 minutes. He has to finish watching the video by 10:30pm. At what time should he start the video so that he finishes the video at exactly 10:30pm?

(A) 7:35pm (B) 8:15pm (C) 8:35pm (D) 9:15pm

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9 The fraction $\frac{2}{3}$ is

(A) less than $\frac{6}{10}$

(B) greater than $\frac{12}{20}$

(C) equal to 0·6

(D) Equal to 66%

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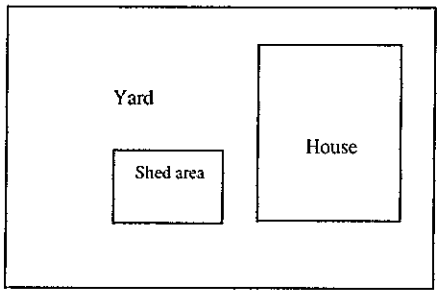
10 The plan shown uses a scale of 1:500. What is the area, in m^2 of the Shed area?



(A) $1{\cdot}5m^2$

(B) $15m^2$

(C) $37{\cdot}5m^2$

(D) $375\ 000m^2$

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11 Given that $\pi \approx 3{\cdot}14$, the area of a circle with a radius of 6cm, to the nearest centimetre, is

(A) $18cm^2$ (B) $38cm^2$ (C) $59cm^2$ (D) $113cm^2$

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12 If $\alpha < -5$, then α can have the value

(A) -9 (B) -3 (C) $-\frac{1}{5}$ (D) 0

Complete your answers to Questions 13-25 on Section 1 – Answer Sheet 1.

13 If 4% of a number is 2·2, what is the number?

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14 The stem-and-leaf plot below shows the scores for a class of 15 students in a test.

TEST RESULTS	
5	3 4 8 9
6	5 7
7	2 7 9
8	0 2 5
9	3 7
10	0

What is the median test score?

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15 The fraction $\frac{18}{\beta}$ has a value between 4 and 5, where β is a whole number. Find a possible value for β.

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16 Estimate the value of $\frac{98}{2{\cdot}6 + 1{\cdot}3}$ giving your answer as a whole number.

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17 A bag contains 24 coloured balls. Anil chooses a ball at random from the bag. He records its colour and then returns the ball to the bag. He does this six times.

RESULTS	
Colour	Amount Drawn
Yellow	3
Red	2
Blue	1

From the results in the table, what is the best estimate for the number of red balls in the bag?

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18 Raymond bought a pie for \$2·00.
One week later the price of the pie had dropped to \$1·70.

Find the percentage decrease on the original price.

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19 In a special mixture of *Sand/Cement*, sand and cement is mixed in the ratio of 2:7.

How much cement is used to make a mix of 18 kilograms?

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20 A can of paint costs $24.
The paint itself costs 7 times as much as the paint tin.

What is the value of the paint tin?

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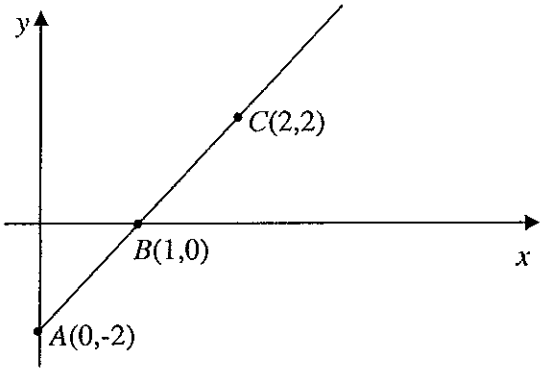
21 Wesley uses the table of values to produce the straight line drawn below.

x	0	1	2
y	-2	0	2



The point $D(8,q)$ also lies on the straight line.

Find the value of q.

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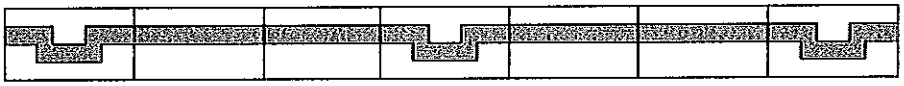
22 Cindy lays a pattern of tiles as shown below.



She continues the pattern and notes the design on the 11^{th}, 17^{th}, 31^{st} and 35^{th} tiles.

Which numbered tile is different from the other three?

Each of Questions 23, 24 and 25 may have MORE THAN ONE correct answer. Fill in EVERY answer for each of these questions on Section 1 – Answer Sheet 1.

23 $8{\cdot}2 \times 2$ is the same as

(A) $8{\cdot}2 \times 10 \div 2$ (B) $8{\cdot}2 \div 10 \times 2$ (C) $82 \div 0{\cdot}2$ (D) $82 \times 0{\cdot}2$

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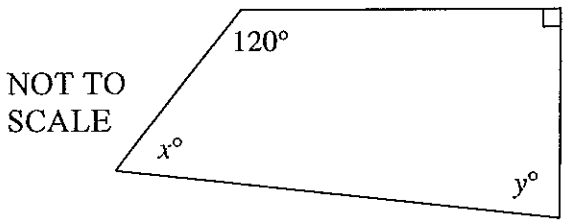
24 In the quadrilateral below, the values of x and y could be



(A) $x = 145$ and $y = 5$ (B) $x = 200$ and $y = 110$

(C) $x = 70$ and $y = 80$ (D) $x = 65$ and $y = 85$

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25 Which of the following will simplify to 4?

(A) $\sqrt{5^2 - 3^2}$ (B) $31 - 9 \times 3$

(C) $1 + 1 \times 2$ (D) $16 \div 2 \times 2$
