Analysis of Exam Questions

Number Strand

1. After rounding to the nearest thousand, the total attendance of the book fair is about 243 000 today. Which of the following numbers is the greatest possible value of the total attendance?

A. 243 999
B. 243 499
C. 242 999
D. 242 500

Scoring Key
- Round all numbers to the nearest thousand.
- Note the key word 'the greatest value'.

2.

$4\frac{5}{6}$? $5\frac{2}{5}$

The above three number cards are arranged from the smallest to the largest. Which of the following can be the number on the second card?

A. $4\frac{2}{3}$
B. $4\frac{7}{9}$
C. $5\frac{3}{10}$
D. $5\frac{1}{2}$

Scoring Key
- When the whole number parts are the same, we just need to compare the fraction part.

3. 28 students take part in the tree planting activity. Each student is in charge of one task. $\frac{4}{7}$ of the students are in charge of excavation, $\frac{1}{4}$ of the students are in charge of planting and $\frac{5}{28}$ of the students are in charge of mud covering.

(a) What fraction of the students are in charge of planting and mud covering? (Give the answer only)

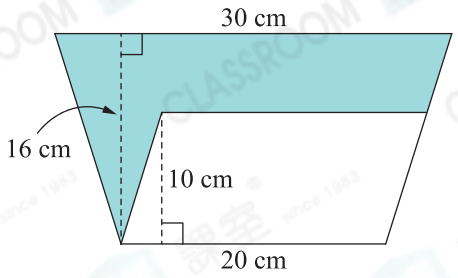
Answer: _____

Scoring Key
- Find the fraction of students in charge of planting and mud covering respectively.

(b) How many students are in charge of excavation? (Show your working)

Scoring Key
- Answer requires:
  - expression
  - answer
  - explanation

4.



What is the area of the coloured part as shown in the above figure?

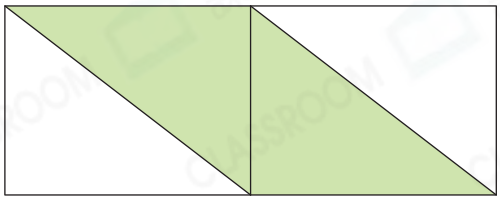
A. 800 cm^2 B. 600 cm^2

C. 400 cm^2 D. 200 cm^2

Scoring Key

- Area of the coloured part = Area of trapezium − Area of parallelogram

5.



The above figure is composed of 2 rectangles with length of 26 cm and width of 20 cm. What is the area of the coloured part?

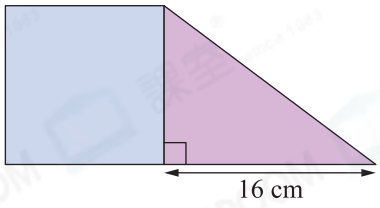
A. 520 cm^2 B. 460 cm^2

C. 260 cm^2 D. 148 cm^2

Scoring Key

- The coloured part is a parallelogram.
- Find out the relationship between base and height of the parallelogram and length and width of the rectangle.

6.



The above figure is composed of a square and a right-angled triangle. The area of the right-angled triangle is 96 cm^2.

(a) What is the length of side of the square? (Give the answer only)

Answer: _____ cm

(b) What is the area of the whole figure? (Give the answer only)

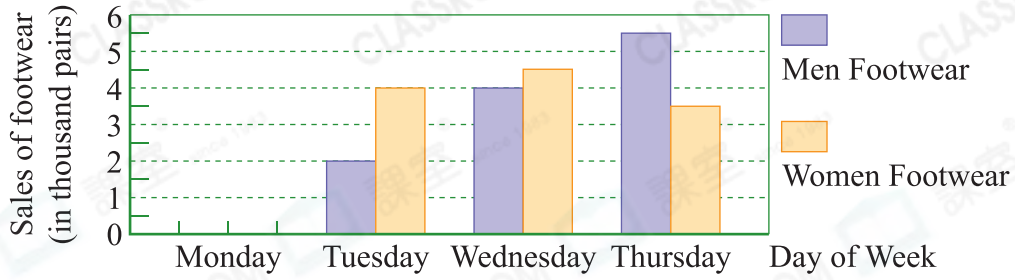
Answer: _____ cm^2

Scoring Key

- The height of the triangle is the same as the side of the square.
- Area of a trapezium = (lower base + upper base) × height ÷ 2

Data Handling Strand

7. Sales of footwear of a shop from Monday to Thursday



(a) The sales of men footwear were 3000 pairs on Monday. It was 1500 pairs less than that of women footwear. Draw the bars representing the sales of footwear on Monday.

Scoring Key

- Find the amount each grid in the bar chart represents first.

(b) Which day's sales of footwear was the highest? How many pairs were sold? (Give the answer only)

Answer: _____, _____ pairs in total.

Scoring Key

- Add up the sales of 2 kinds of footwear on each day.

Algebra Strand

8.

	Price
Adult ticket	$\$p$
Child ticket (12 years old or under)	\$8

Scoring Key

- Determine the category of ticket Elaine should buy according to her age.

Last Sunday was Elaine's 13th birthday. She and her parents took ferry to Lamma Island. The above table shows the price of ferry ticket.

(a) According the table above, how much did they need to pay in total? (Give the answer only. Express the answer in terms of p)

Answer: \$_____

(b) If they pay \$45 in total, how much does an adult ticket cost? (Use an equation to solve the problem and show your working)