

Tuesday (answers) – LO: to find the area and perimeter of compound shapes.

Varied fluency

Developing

- 1a. False, the correct answer is 47cm^2 .
2a. Area = $12 \times 4 = 48\text{ft}^2$, Perimeter = 32ft .
3a. A. Area = 48cm^2 , Perimeter = 32cm .
B. Area = 63cm^2 , Perimeter = 32cm .
4a. A

Expected

- 5a. False, the correct answer is 98cm^2 .
6a. Area = $15 \times 4 = 60\text{ft}^2$, Perimeter = 38ft .
7a. A. Area = 108cm^2 , Perimeter = 42cm .
B. Area = 72cm^2 , Perimeter = 36cm .
8a. B

Greater Depth

- 9a. False, the correct answer is 31.5cm^2
10a. Area = $18 \times 3.5 = 63\text{m}^2$, Perimeter = 43m .
11a. A. Area = 49.5cm^2 , Perimeter = 29cm .
B. Area = 3.6m^2 , Perimeter = 13.2m .
12a. B

Reasoning and problem solving

Developing

- 1b. A = 56cm^2 , P = 36cm .
2b. Largest area = $6\text{cm} \times 6\text{cm} = 36\text{cm}^2$
smallest area = $11\text{cm} \times 1\text{cm} = 11\text{cm}^2$
3b. Disagree. To find the area, you multiply length by width and to find the perimeter you add all the sides together.

Expected

- 4b. A = 44cm^2 , P = 48cm .
5b. Largest area = $17\text{cm} \times 17\text{cm} = 289\text{cm}^2$
smallest area = $33\text{cm} \times 1\text{cm} = 33\text{cm}^2$
6b. Disagree. Some rectangles have equal area and perimeter, for example $3\text{cm} \times 6\text{cm}$, however others do not, such as $7\text{cm} \times 5\text{cm}$.

Greater Depth

- 7b. A = 85.75cm^2 , P = 56cm .
8b. Largest area = $18.5\text{cm} \times 19\text{cm} = 351.5\text{cm}^2$
smallest area = $37\text{cm} \times 0.5\text{cm} = 18.5\text{cm}^2$
9b. Disagree. You can have a rectangle that has a perimeter with a decimal number but has a whole number area. For example; Perimeter = $1.2\text{cm} + 5\text{cm} + 1.2\text{cm} + 5\text{cm} = 12.4\text{cm}$.
Area = $1.2 \times 5 = 6\text{cm}^2$.