Test 17

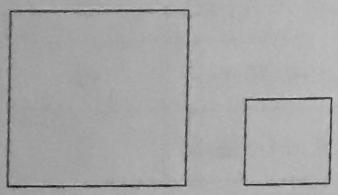
You have 10 minutes to complete this test.

You have 10 questions to complete within the given time.

Circle the letter next to the correct answer.

(1) 2 squares are shown below. The area of the larger square is 16 cm^2. The ratio of the area of the larger square to the area of the smaller square is 4:1.

What is the side length of the smaller square?

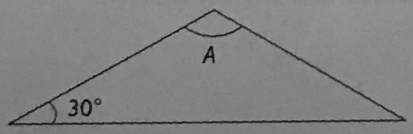


A	B	C	D	E
3 cm	4 cm	12 cm	2 cm	1 cm

(2) Simon swims 25 lengths of a pool that is 18 m long. How far has he swum?

A	B	C	D	E
450 km	500 m	0.45 km	350 m	250 m

(3) The triangle below is isosceles. What is the value of Angle *A*?



A	B	C	D	E
160°	75°	80°	150°	120°

(4) What is 0.85 expressed as a fraction in the simplest form?

A	B	C	D	E
$\frac{17}{20}$	$\frac{16}{20}$	$\frac{19}{20}$	$\frac{17}{25}$	$\frac{13}{20}$

6 This table shows the breakfast menu at a café.

Toast with peanut butter
Toast with omelette
Toast with butter and sugar
Toast with chocolate spread

The café sells 175 meals at breakfast. 60 toasts with peanut butter and 35 toasts with butter and sugar are sold. An equal number of toasts with omelette and toasts with chocolate spread are sold.

How many toasts with omelette are sold?

A	B	C	D	E
35	50	30	20	40

8 A cafeteria has 16 tables with a capacity of 6 chairs each and 20 tables with a capacity of 4 chairs each.

What is the maximum number of seats available at the cafeteria?

A	B	C	D	E
202	176	142	163	324

7 This is a floor plan of a room covered in black and white square tiles.

Black tiles cost £12 each and white tiles cost £4.50 each.

What is the total cost of the tiles used to cover the floor?

A	B	C	D	E
£432	£162	£81	£297	£216

Questions continue on next page

8 Two girls share a 2-litre bottle of juice. One girl drinks 200 ml while the other drinks 350 mL.

What fraction of the juice remains in the bottle?

A	B	C	D	E
$\frac{29}{35}$	$\frac{29}{40}$	$\frac{19}{40}$	$\frac{5}{9}$	$\frac{15}{40}$

9 Which of these numbers is not a multiple of 4?

A	B	C	D	E
702	696	1800	716	1280

10 Figure C is formed from 3 identical regular pentagons, each with a side length of a cm.

What is the perimeter of Figure C?

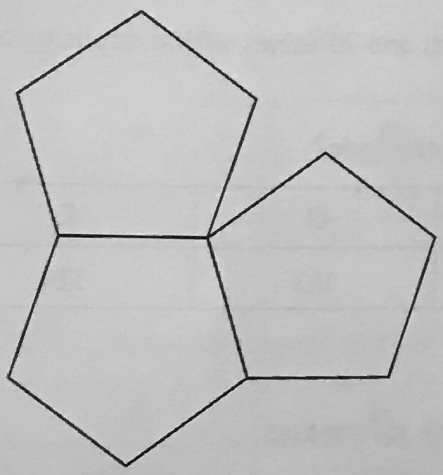


Figure C

A	B	C	D	E
$5a$ cm	$\frac{5}{a}$ cm	$11a$ cm	$12a$ cm	$15a$ cm

Score: ..... / 10