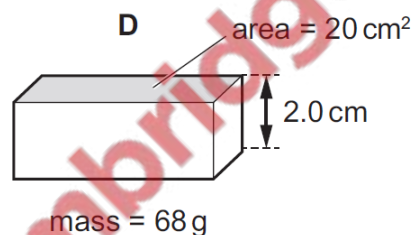
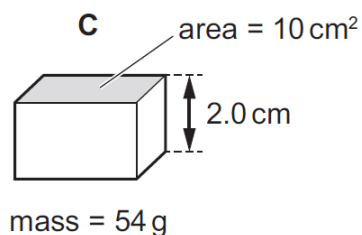
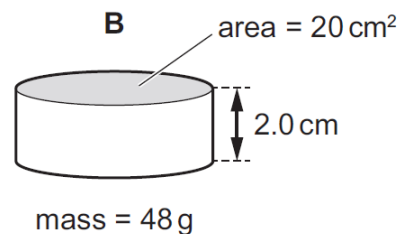
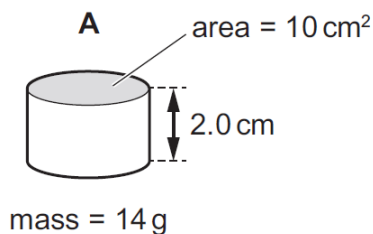


## Density – 2019 June

1. 0625/11/M/J/19/No.6

The diagrams show four solid blocks with their dimensions and masses.

Which block has the greatest density?



2. 0625/12/M/J/19/No.6

A metal has a density of  $8.0 \text{ g/cm}^3$ . A solid cube of mass  $1.0 \text{ kg}$  is made from this metal.

How long is each side of the cube?

**A**  $0.50 \text{ cm}$

**B**  $2.0 \text{ cm}$

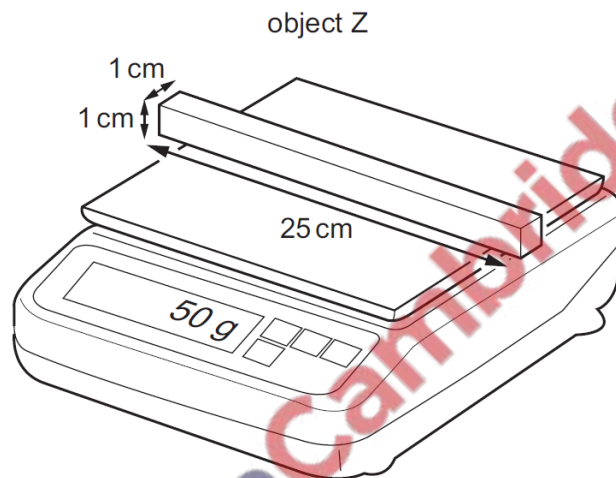
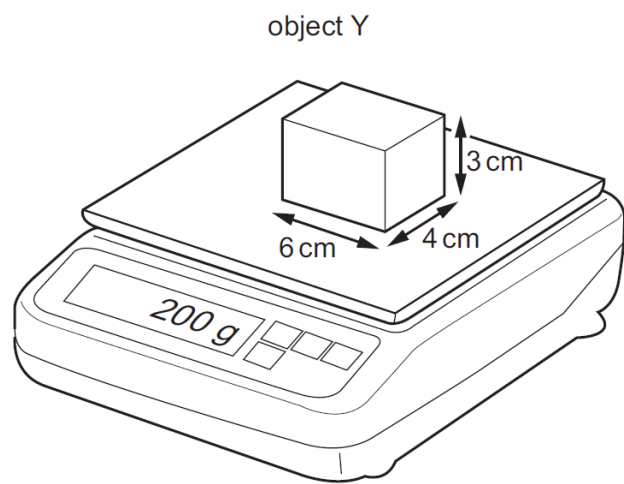
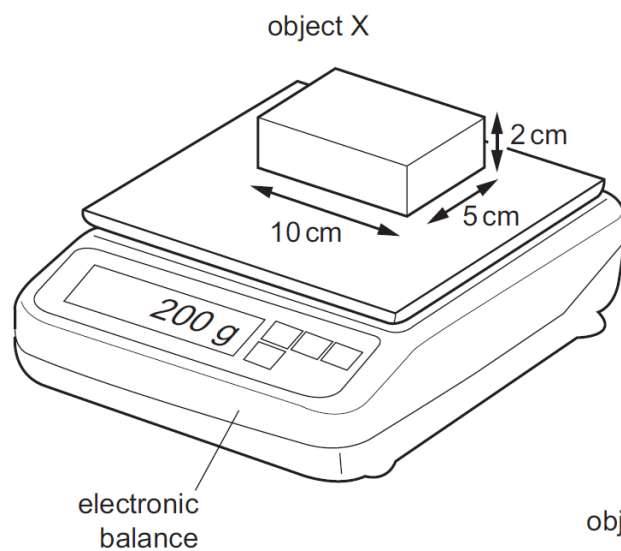
**C**  $5.0 \text{ cm}$

**D**  $42 \text{ cm}$

3. 0625/13,23/M/J/19/No.6,5

X, Y and Z are three regularly shaped solid objects.

Their dimensions and masses are shown in the diagrams.



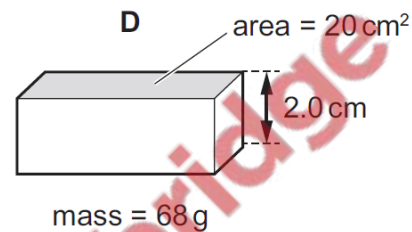
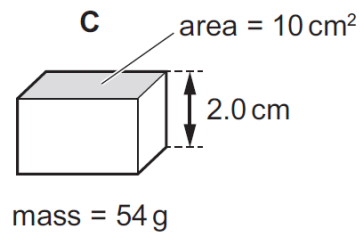
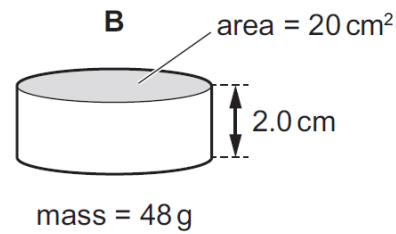
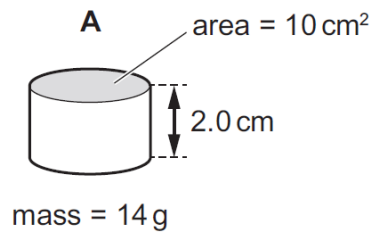
Which objects have the same density?

- A** X, Y and Z    **B** X and Y only    **C** X and Z only    **D** Y and Z only

4. 0625/21/M/J/19/No.5

The diagrams show four solid blocks with their dimensions and masses.

Which block has the greatest density?



5. 0625/22/M/J/19/No.5

A metal has a density of  $8.0 \text{ g/cm}^3$ . A solid cube of mass  $1.0 \text{ kg}$  is made from this metal.

How long is each side of the cube?

**A** 0.50 cm

**B** 2.0 cm

**C** 5.0 cm

**D** 42 cm

6. 0625/12, 22/F/M/19/No.6

A solid ball has a volume of  $4.0 \text{ cm}^3$ . The density of the ball is  $1.6 \text{ g/cm}^3$ .

What is the mass of the ball?

**A** 0.4 g

**B** 2.5 g

**C** 4.0 g

**D** 6.4 g