



# Order by Size

## Question Paper 1

Level	IGCSE
Subject	Maths (0580)
Exam Board	Cambridge International Examinations (CIE)
Paper Type	Extended
Topic	Number
Sub-Topic	Order by Size
Booklet	Question Paper 1

**Time Allowed:** 60 minutes

**Score:** /50

**Percentage:** /100

### Grade Boundaries:

A*	A	B	C	D	E	U
>85%	75%	60%	45%	35%	25%	<25%

1 Write the following in order of size, smallest first.

$$\pi \quad 3.14 \quad \frac{22}{7} \quad 3.142 \quad 3$$

*Answer* ..... < ..... < ..... < ..... < ..... [2]  
*smallest*

2 Write the following in order of size, smallest first.

$$0.34 \quad \sqrt{0.6} \quad 0.6^2 \quad 0.7^3$$

*Answer* ..... < ..... < ..... < ..... [2]  
*smallest*

3 Write the following in order of size, smallest first.

$$0.5^2 \quad 0.5 \quad 0.5^3 \quad \sqrt[3]{0.5}$$

Answer ..... < ..... < ..... < ..... [2]

4 Write the following in order, smallest first.

$$\sqrt{0.1} \quad \frac{43}{201} \quad 2\frac{1}{2}\% \quad 0.$$

Answer ..... < ..... < ..... < ..... [2]

5 Write the following in order of size, smallest first.

$$19\% \quad \frac{1}{5} \quad \sqrt{0.038} \quad \sin 11.4^\circ \quad 0 \quad 5$$

Answer ..... < ..... < ..... < ..... < ..... [2]

6 Write the following in order ~~first~~ size, smallest

$$\cos 100^\circ \quad \tan 100^\circ \quad \frac{1}{100} \quad 100^{-0.1}$$

Answer ..... < ..... < ..... < ..... [2]

7 Write the following in order of size, **smallest** first.

$$(1.5)^{\frac{2}{3}} \quad \left(\frac{2}{3}\right)^{1.5} \quad \left(\frac{2}{3}\right)^{-1.5} \quad \left(-\frac{2}{3}\right)^{\frac{2}{3}}$$

Answer ..... < ..... < ..... < ..... [2]

8 Write the following in order of size, **smallest** first.

$$0.47 \quad \frac{8}{17} \quad \sqrt{0.22} \quad \tan 25^\circ$$

*Answer* ..... < ..... < ..... < ..... [2]

9 For this question,  $1 < x < 2$ .

Write the following in order of size, **smallest** first.

$$\frac{5}{x} \quad 5x \quad \frac{x}{5} \quad x - 5$$

*Answer* ..... < ..... < ..... < ..... [2]

10 Write the following in order of size, **largest** first.

$$\sin 158^\circ \quad \cos 158^\circ \quad \cos 38^\circ \quad \sin 38^\circ$$

*Answer* ..... > ..... > ..... > ..... [2]

11 Write the following in order of size, **smallest** first.

$$\sqrt{0.9} \quad \sqrt[3]{0.9} \quad 0.9^2 \quad 0.9^3$$

*Answer* ..... < ..... < ..... < ..... [2]

12 Write the following in order of size, **smallest** first.

$$\frac{20}{41} \quad \frac{80}{161} \quad 0.492 \quad 4.93\%$$

*Answer* ..... < ..... < ..... < ..... [2]

13 Write the numbers in order of size with the **smallest** first.

$$\sqrt{10} \quad 3.14 \quad \frac{22}{7} \quad \pi$$

*Answer* ..... < ..... < ..... < ..... [2]

14 Write the following in order of size, **smallest** first.

$$\frac{2}{\sqrt{3}} \quad 2 - \sqrt{3} \quad \sqrt{3} \quad 2 - \frac{\sqrt{3}}{2}$$

Answer ..... < ..... < ..... < ..... [2]

15 Write the following in order of size, smallest first.

$$\sqrt{\frac{9}{17}} \quad \frac{5}{7} \quad 72\% \quad \left(\frac{4}{3}\right)^{-1}$$

Answer ..... < ..... < ..... < ..... [2]

16 Write the following in order of size, smallest first.

$$\frac{399}{401} \quad \frac{698}{701} \quad \frac{598}{601}$$

Answer ..... < ..... < ..... [2]

17 When  $0 < x < 0.9$ , write the following in order of size with the **smallest** first.

$$\cos x^\circ$$

$$x^2$$

$$x^{-1}$$

Answer ..... < ..... < ..... [2]

18 Write the following in order of size, **smallest** first.

$$\cos 100^\circ$$

$$\sin 100^\circ$$

$$\tan 100^\circ$$

Answer ..... < ..... < ..... [2]

19

$$0.0008 \quad 8 \times 10^{-5} \quad 0.8\% \quad \frac{1}{125\,000}$$

Write the numbers above in order, smallest first.

Answer ..... < ..... < ..... < ..... [2]



20 Write the following in order of size, smallest first.

$$\frac{\pi}{4} \quad \frac{1}{\sqrt{2}} \quad \frac{3}{4} \quad \sin 47^\circ$$

Answer ..... < ..... < ..... < ..... [2]

21 Celine invests \$ 800 for 5 **months** at 3% simple interest per year.  
Calculate the interest she receives.

Answer \$ ..... [2]

22 Write the numbers  $0.5^2$ ,  $\sqrt{0.5}$ ,  $0.5^3$  in order with the **smallest** first.

Answer ..... < ..... < ..... [2]

23 Rearrange the quantities in order with the smallest first.

$$\frac{1}{8}\%, \quad \frac{3}{2500}, \quad 0.00126$$

*Answer*.....<.....<..... [2]

24 Write in order of size, smallest first,

$$\frac{5}{98}, \quad 0.049, \quad 5\%.$$

*Answer* .....<.....<..... [2]

25 Write the four values in order, smallest first.

$$\frac{1}{1000}, \quad \frac{11}{1000}, \quad 0.1\%, \quad 0.01$$

*Answer* ..... < ..... < ..... < ..... [2]