

Number system

Exercises:

1. Write in order, the smallest first : 20, 19.5, $19\frac{3}{4}$

2. Which is larger : $\frac{13}{16}$ or $\frac{21}{26}$

3. Simplify the following by rationalising their denominators.

a) $\frac{3}{\sqrt{2}}$ b) $\frac{3}{7\sqrt{2}}$ c) $\frac{1}{\sqrt{2}}$ d) $\frac{9\sqrt{2}}{2\sqrt{3}}$

d) $\frac{9 + \sqrt{2}}{3 + 2\sqrt{2}}$

4. Write down the first five terms of the sequence whose nth terms are:

a) $4n - 1$ b) $2n^2$

5. If $\frac{2a - b}{2a + b} = \frac{1}{2}$ calculate the value of $\frac{a}{b}$

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Answers

Exercises:

- Write in order, the smallest first : 20 , 19.5 , $19\frac{3}{4}$
- Which is larger : $\frac{13}{16}$ or $\frac{21}{26}$
- Simplify the following by rationalising their denominators.
a) $\frac{3\sqrt{2}}{2}$ b) $\frac{2\sqrt{2}}{7}$ c) $\frac{\sqrt{2}}{2}$ d) $\frac{3\sqrt{6}}{2}$
- Write down the first five terms of the sequence whose n th terms are:
a) $3, 7, 11, 15, 19$
b) $2, 8, 18, 32, 50$
- If $\frac{2a - b}{2a + b} = \frac{1}{2}$ calculate the value of $\frac{a}{b}$
 $1\frac{1}{2}$