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

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

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

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

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

Number system

Exercises:

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

   3   1   2

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

3. 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) $\frac{3\sqrt{6}}{2}$

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

   a) 3, 7, 11, 15, 19
   b) 2, 8, 18, 32, 50

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

   $1\frac{1}{2}$

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