

## Year 9 Number Worksheet



1. Find 3 rational numbers between 1 and 2

2. Write  $1/17$  in decimal form.

3. Show that  $0.\overline{3} = 1/3$

4. Expand using standard formula :  $\left[\frac{1}{4}a - \frac{1}{2}b + 1\right]^2$

5. Find the value of 'a' & 'b' if  $\frac{1}{7+3\sqrt{2}} = a+b\sqrt{2}$

6. Rationalise the denominator .

$$(5\sqrt{2} + 2\sqrt{5}) / (5\sqrt{2} - 2\sqrt{5})$$

7. Show that 24 to the power of  $2/3$  is irrational

9. Evaluate  $(6.4)^{\frac{1}{10}} \times \sqrt[4]{(256)^3} + \sqrt{80}$

10. A pair of dice is thrown. If the two numbers appearing on them are different, find the probability that the sum of the numbers appearing is 6.