

3. Simplify the Equation:

Rewrite 100^2 as 10000:

$$12.8 = \frac{2000 \cdot r^2}{10000}$$

To eliminate the fraction, multiply both sides by 10000:

$$12.8 \cdot 10000 = 2000 \cdot r^2$$

$$128000 = 2000 \cdot r^2$$

4. Solve for r^2 :

Divide both sides by 2000:

$$r^2 = \frac{128000}{2000}$$

$$r^2 = 64$$

5. Find r :

To find r , take the square root of both sides:

$$r = \sqrt{64}$$

$$r = 8$$

6. Conclusion:

The rate of interest is:

$$r = 8\%$$

Final Answer:

The rate of interest is **8%**.