

Exercise 22

Without using a calculator, evaluate these. Where appropriate, leave the answer as a fraction.

1 3^{-2}

2 4^{-2}

3 10^{-1}

4 10^{-2}

5 2^{-3}

6 5^{-2}

7 8^{-1}

8 12^{-2}

11 4^{-3}

12 3^{-3}

15 $2^2 \times 2^{-1}$

16 $2^3 \times 2^{-1}$

17 $2^{-1} \div 2^3$

18 $2^{-2} \div 2^3$

19 $(3^{-1})^2$

20 $(2^2)^{-2}$

21 $2^{-2} \times 2^{-2}$

22 $3^{-1} \times 3^{-2}$

23 $2^{-2} \div 2^{-1}$

24 $3^{-3} \div 3^{-2}$

25 $(2^{-2})^{-2}$

26 $(3^{-3})^{-2}$

Investigate raising number to fractional powers.