1. Find the reciprocals of:

   a) 2 b) 5 c) $\frac{1}{2}$ d) $\frac{4}{5}$

2. Find, as a fraction in its simplest form, the reciprocals of:

   a) 1.2 b) 0.4 c) 12.5 d) 0.25

3. Find the reciprocal of:

   a) 3^{-2} b) 5^{-1} c) 4^{-3} d) 2^{-4}

4. Write each calculation as a fraction:

   a) $\left(\frac{3}{4}\right)^{2}$ b) $\left(\frac{2}{5}\right)^{3}$ c) $\left(\frac{3}{5}\right)^{-2}$ d) $\left(\frac{3}{2}\right)^{-3}$

Answers:

1. a) $\frac{1}{2}$ b) $\frac{1}{5}$ c) 2 d) $\frac{5}{4}$

2. a) $\frac{1}{1.2}=\frac{10}{12}=\frac{5}{6}$ b) $\frac{1}{0.4}=\frac{10}{4}=\frac{5}{2}$

   c) $\frac{1}{12.5}=\frac{10}{125}=\frac{2}{25}$ d) $\frac{1}{0.25}=\frac{100}{25}=4$

3. a) $\frac{1}{3^2}=\frac{1}{9}$ b) $\frac{1}{5}$

   c) $\frac{1}{4^3}=\frac{1}{64}$ d) $\frac{1}{2^4}=\frac{1}{16}$

4. a) $\frac{3^2}{4^2}=\frac{9}{16}$ b) $\frac{2^3}{5^3}=\frac{8}{125}$

   c) $\frac{5^2}{3^2}=\frac{25}{9}$ d) $\frac{2^3}{3^3}=\frac{8}{27}$