

Indices Test 3

- 1) $5p^5 \times 3p^3 = 15p^8$
- 2) $8k^6 \times 2k = 16k^7$
- 3) $40x^{40} \div 8x^8 = 5x^{32}$
- 4) $15x^7 \div 5x^{10} = 3x^{-3}$ or $\frac{3}{x^3}$
- 5) $(2p^6)^4 = 16p^{24}$
- 6) $(4x)^3 = 64x^3$
- 7) $8^1 = 8$
- 8) $8^0 = 1$
- 9) $2^{-2} = \frac{1}{2^2} = \frac{1}{4}$
- 10) $27^{\frac{1}{3}} = \sqrt[3]{27} = 3$
- 11) $16^{\frac{3}{4}} = (4\sqrt{16})^3 = 2^3 = 8$
- 12) $9^{-\frac{1}{2}} = \frac{1}{9^{\frac{1}{2}}} = \frac{1}{\sqrt{9}} = \frac{1}{3}$
- 13) $25^{-\frac{3}{2}} = \frac{1}{25^{\frac{3}{2}}} = \frac{1}{(\sqrt{25})^3} = \frac{1}{5^3} = \frac{1}{125}$
- 14) $6h^2k^3 \times 2h^3k^3j^3 = 12h^5k^6j^3$
- 15) $\frac{10x^5y^6}{5x^5y^7} = 2y^{-1}$ or $\frac{2}{y}$