

Indices Test 2

- 1) $6h^4 \times 3h^3 = 18h^7$
- 2) $5p \times 6p^2 = 30p^3$
- 3) $21k^7 \div 3k^3 = 7k^4$
- 4) $40y^8 \div 20y^4 = 2y^4$
- 5) $(3q^2)^4 = 81q^8$
- 6) $(2p^3)^5 = 32p^{15}$
- 7) $6^1 = 6$
- 8) $4^0 = 1$
- 9) $3^{-3} = \frac{1}{3^3} = \frac{1}{27}$
- 10) $36^{\frac{1}{2}} = \sqrt{36} = 6$
- 11) $16^{\frac{3}{2}} = (2\sqrt{16})^3 = 4^3 = 64$
- 12) $8^{-\frac{1}{3}} = \frac{1}{8^{1/3}} = \frac{1}{\sqrt[3]{8}} = \frac{1}{2}$
- 13) $125^{-\frac{2}{3}} = \frac{1}{125^{2/3}} = \frac{1}{(\sqrt[3]{125})^2} = \frac{1}{5^2} = \frac{1}{25}$
- 14) $4pqr^2 \times 2p^2qr = 8p^3q^2r^3$
- 15) $\frac{20a^3bc^3}{4ab^2c} = \frac{5a^2c^2}{b}$ or $5a^2b^{-1}c^2$