

Indices Exercises Ex 10C and Ex 10D

Examples from Exercise 10D

$$5) \quad 625^{\frac{1}{2}} = \sqrt{625} = 25$$

$$10) \quad 512^{\frac{1}{3}} = \sqrt[3]{512} = 8$$

$$15) \quad 100,000^{\frac{1}{5}} = \sqrt[5]{100,000} = 10$$

$$20) \quad 216^{\frac{1}{3}} = \sqrt[3]{216} = 6$$

$$25) \quad 1000000^{-\frac{1}{6}} = \frac{1}{1000000^{\frac{1}{6}}} = \frac{1}{10}$$

$$30) \quad \left(\frac{25}{64}\right)^{\frac{1}{2}} = \sqrt{\frac{25}{64}} = \frac{5}{8}$$

$$35) \quad \left(\frac{512}{343}\right)^{\frac{1}{3}} = \sqrt[3]{\frac{512}{343}} = \frac{8}{7}$$

Exercise 10c

$$7c) \quad 6a^2b^3 \times 5a^{-4}b^{-5} = 30a^{-2}b^{-2} \text{ or } \frac{30}{a^2b^2}$$

$$8c) \quad \frac{3abc \times 4a^3b^2c \times bc^2}{9a^2bc} = \frac{72a^4b^3c^4}{9a^2bc} = 8a^2b^2c^3$$

$$7b) \quad 5a^2b^4 \times 2ab^{-3} = 10a^3b$$

$$8b \quad \frac{2a^2bc^2 \times 6abc^3}{4ab^2c} = \frac{12a^3b^2c^5}{4ab^2c} = 3a^2c^4$$
