Revision Indices 5.1

Revision

2^3

Questions 1

Simplify the following leaving your answer in Indices Format

a) $2^3 \times 2^4 =$

b) $2^5 \times 2 =$

c) $4^2 \times 4^8 \times 3^2 =$

d) $2^{13} \div 2^4 =$

e) $2^5 \div 2 =$

f) $8^{12} \div 8^8 =$

Questions 2

Simplify the following leaving your answer in Integer Format

a) $2^0 =$

b) $2^5 \times 5^0 =$

c) $23^0 \times 4^2 \times 4^2 =$

d) $2^0 \div 2^4 =$

e) $2^0 \div 2 =$

f) $8^2 \div 8^0 =$

Questions 3

Simplify the following leaving your answer in positive Integer Format

a) $(2^0)^3 =$

b) $(2^5)^3 =$

c) $(2^{-4})^3 =$

d) $2^0 \div (2)^4 =$

e) $(5^2)^3 \div 125$

f) $\frac{(-6)^2 \times 3^2}{6^{10} \times 3^5}$

Questions 4

Simplify algebraic products and quotients using index laws (leave answer in positive indices form where possible)

a) $2a^3 \times -5a^4 =$

b) $z^5 \times 4z =$

c) $a^2 \times y^8 \times 3x^2 =$

d) $2x^{13} \div 14x^4 =$

e) $3y^5 \div 9 =$

f) $4b^{12} \div b^8 =$

Questions 5

Simplify algebraic products and quotients using index laws (leave answer in positive indices form where possible)

a) $(2x^0)^3 =$

b) $(2^5x^5)^3 =$

c) $(2x^4)^3 =$

d) $2b^0 \div (2a)^4 =$

e) $(5^2)^3 \div 5$

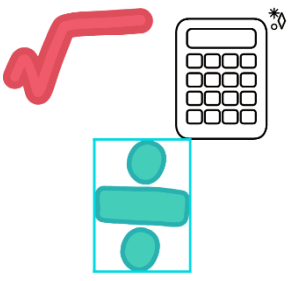
f) $\dfrac{(-6x)^2 \times 3y^2}{6y^{10} \times 3x^5}$

Questions 6

Complete the following table (use a calculator but leave your answer as a positive integer

2^2	2^1	2^0	2^{-1}	2^{-2}	2^{-3}
			$\frac{1}{2}$		$\frac{1}{2^3} = \frac{1}{8}$

Are the following expressions True or False?



a) $a^2 \times a^3 = a^6$ Show reason (try substituting a value for 'a').

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b) $2x^3 \times 4x^3 = 2x^3 + 4x^3$? Why

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