

SMART EXAM RESOURCES
CAMBRIDGE LOWER SECONDARY MATHS
STAGE 8
TOPIC: INDICES
SET-1

- 1 Write a number in each box to make each statement correct.

$$8^0 = \boxed{}$$

$$8^{15} \div 8^5 = 8^{\boxed{}}$$

[2]

MARK SCHEME

0.7	1	Accept 70% or $\frac{7}{10}$
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2 Find the value of x when $36 \times 56 = 2^x \times 3^2 \times 7$

$x =$ [2]

MARK SCHEME

$(x =) 5$	2	<p>Award 1 mark for $36 = 2^2 \times 3^2$ or $56 = 2^3 \times 7$</p> <p>or for $\frac{36 \times 56}{3^2 \times 7}$ or equivalent or better</p> <p>or for answer 2^5</p>	<p>e.g. $\frac{2016}{63}$ or $\frac{4 \times 8}{1 \times 1}$ or 32</p>
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- 3 Complete each of these calculations with the correct whole number.

$$13^0 = \dots\dots\dots$$

$$(2^3)^2 = \dots\dots\dots$$

$$11^{15} \div 11^{13} = \dots\dots\dots$$

[3]

Mark Scheme:

1 64 121	3	Award 1 mark for each correct number or if 0 scored, for 2^6 and 11^2 seen.	
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4 Put a ring around the expression that is equivalent to $m \times m \times m \times m \times m$

$5m$

m^5

$\frac{m}{5}$

5^m

[1]

MARK SCHEME

$$5m \quad m^5 \quad \frac{m}{5} \quad 5^m$$

5

Write **integers** in the boxes to make each statement correct.

$$7^0 = \boxed{}$$

$$7^{20} \div 7^{18} = \boxed{}$$

[2]

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MARK SCHEME

1 and 49	2	Award 1 mark for each correct answer.	Do not accept 7^2
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