



GCSE Foundation/Higher 02

Number



Questions



15 minutes



13 marks

Powers and roots

Q1. (a) Simplify $x^2 \times x^3$

Answer

(1)

(b) Simplify $y^8 \div y^5$

Answer

(1)

(c) Expand $x(x^3 - 3)$

.....
.....

Answer

(2)

(Total 4 marks)

Q2. Tom says



64 is a **square**
number

Sam says



64 is a **cube**
number

Tom and Sam are both right.
Explain why.

.....
.....
.....
.....

(Total 2 marks)

Q3. (a) Simplify

(i) $y^7 \times y^2$

.....

Answer

(1)

(ii) $y^7 \div y^2$

.....

Answer

(1)

(iii) $(y^7)^2$

.....

Answer

(1)

(b) (i) If $y = -1$ which answer in part (a) is positive?

.....

Answer

(1)

(ii) If $y = 0.5$ which answer in part (a) has the greatest value?

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Answer

(1)

(Total 5 marks)

Q4. Erin is squaring numbers.

She says that it is possible to get an answer that is smaller than the number she started with.

Show that Erin is correct.

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(Total 2 marks)

