

## Workout

Question 1: Write out in full.  
e.g.  $7^4 = 7 \times 7 \times 7 \times 7$

- (a)  $9^2$       (b)  $10^3$       (c)  $2^5$       (d)  $3^8$       (e)  $5^3$       (f)  $4^6$       (g)  $1^3$   
(h)  $6^7$       (i)  $12^3$       (j)  $50^2$       (k)  $1^9$       (l)  $8^4$       (m)  $9^3$       (o)  $0.5^3$

Question 2: Using a calculator, work out the answers to Question 1.  
Use the power button.

Question 3: Write the following in index notation.  
e.g.  $5 \times 5 \times 5 = 5^3$

- (a)  $4 \times 4 \times 4$       (b)  $7 \times 7 \times 7 \times 7 \times 7 \times 7 \times 7 \times 7$       (c)  $2 \times 2 \times 2 \times 2 \times 2 \times 2$   
(d)  $8 \times 8 \times 8 \times 8$       (e)  $10 \times 10 \times 10 \times 10 \times 10$       (f)  $3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3 \times 3$   
(g)  $0.9 \times 0.9 \times 0.9$       (h)  $5 \times 5 \times 5 \times 5 \times 5 \times 5 \times 5 \times 5 \times 5$       (i)  $120 \times 120 \times 120 \times 120$   
(j)  $2 \times 2$

Question 4: Using a calculator, work out the answers to Question 3.  
Use the power button.

Question 5: Without using a calculator, find the values of the following

- (a)  $10^2$       (b)  $3^3$       (c)  $2^6$       (d)  $5^3$       (e)  $10^3$       (f)  $4^3$       (g)  $1^5$   
(h)  $2^7$       (i)  $1^8$       (j)  $10^5$       (k)  $14^2$       (l)  $5^4$       (m)  $10^6$       (o)  $9^3$

Question 6: Find the values of

- (a)  $2^2$       (b)  $2^3$       (c)  $2^4$       (d)  $2^5$       (e)  $2^6$       (f)  $2^7$       (g)  $2^8$

Question 7: Find the values of

- (a)  $10^2$       (b)  $10^3$       (c)  $10^4$       (d)  $10^5$       (e)  $10^6$       (f)  $10^7$       (g)  $10^8$

## Apply

Question 1: Can you spot any mistakes?

$$6^2 = 12$$

$$1^7 = 7$$

$$10^4 = 40$$

$$2^6 = 32$$

Question 2: Fill in the boxes with possible integers.

$$\square^{\square} = 81$$

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Question 3: Fill in the boxes with possible integers.

$$\square^{\square} = 64$$

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