

Name: _____

Exam Style Questions

Indices



Corbettmaths

Ensure you have: Pencil, pen, ruler, protractor, pair of compasses and eraser

You may use tracing paper if needed

Guidance

1. Read each question carefully before you begin answering it.
2. Don't spend too long on one question.
3. Attempt every question.
4. Check your answers seem right.
5. Always show your workings

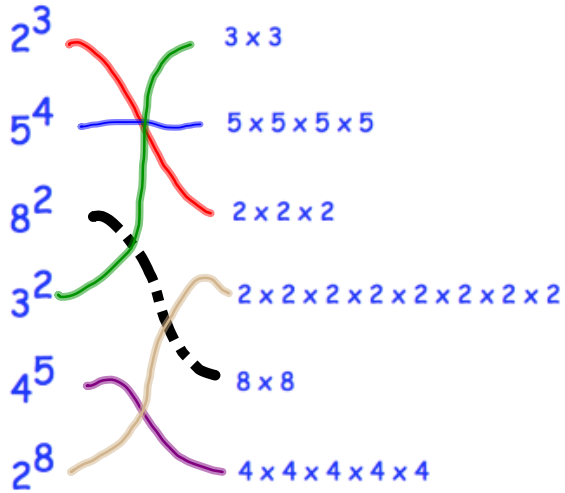
Revision for this topic

www.corbettmaths.com/contents

Video 172



1. Match each of the following



(3)

2. Work out



$$5^2 + 2^3$$
$$25 + 8$$

33

(2)

3. Work out



$$3^3 - 4^2$$
$$27 - 16$$

11

(2)

4. Calculate



$$2.8^2 + 7^3$$

$$7.84 + 343$$

$$\underline{350.84}$$

(2)

5. Calculate



(a) The cube of 8

$$8 \times 8 \times 8$$

$$\underline{512}$$

(2)

(b) 2^5

$$\underline{32}$$

(2)

6. (a) Calculate 4.25^4 and write down the full calculator display



$$\underline{326.2539063}$$

(1)

(b) Round your answer to one decimal place

$$\underline{326.3}$$

(1)

7. Calculate



(a) 9^3

729
.....
(2)

(b) 3^4

81
.....
(2)

(c) 10^6

1000000
.....
(1)

(d) 1^7

1
.....
(1)

8. Given that



$x^4 = 625$

Write down the value of x

$\sqrt[4]{625} = 5$

5
.....
(1)

9. Given that



$$2^6 = y^3$$

Write down the value of y

$$2^6 = 64 \quad y^3 = 64$$

4

(1)

10. Work out



$$12^4$$

$$12 \times 12 = 144$$

$$144 \times 12 = 1728$$

$$1728 \times 12 = 20736$$

20736

(3)

11. Mary and David think of the same number.



David squares the number.

Mary cubes the number.

Is it possible for David's answer to be greater than Mary's answer?

Explain your answer.

$$0.5^2 = 0.25$$

$$0.5^3 = 0.125$$

yes

(2)