



New Maths GCSE: N8 - Simplifying Surds

Name:

Date:

Which shows a full simplification?

$\sqrt{32}$

A $2\sqrt{8}$
B $4\sqrt{2}$
C $16\sqrt{2}$
D $4\sqrt{8}$

62

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Simplify fully

$\sqrt{5} \times \sqrt{5}$

A $\sqrt{25}$
B 5
C $5\sqrt{5}$
D $\sqrt{55}$

53

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Simplify fully

$2\sqrt{2} \times 3\sqrt{8}$

A 96
B $\sqrt{96}$
C 24
D $6\sqrt{16}$

57

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Simplify fully

$$\frac{\sqrt{75}}{\sqrt{3}}$$

A 25
B 5
C $\sqrt{25}$
D $\sqrt{5}$

56

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Simplify fully

$$\sqrt{3} \times \sqrt{27}$$

A 9
B $\sqrt{81}$
C $\sqrt{9}$
D 3

54

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Find k

$$\sqrt{360} = k\sqrt{10}$$

A 6
B 3600
C 40
D 36

61

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Simplify fully

$$\frac{\sqrt{48}}{\sqrt{12}}$$

A $\sqrt{4}$
B $\sqrt{2}$
C 4
D 2

55

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Simplify fully

$$\frac{\sqrt{12} \times \sqrt{3}}{2}$$

A 3
 B $\sqrt{18}$
 C $3\sqrt{2}$
 D $\frac{1}{2}\sqrt{36}$

58

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Find k

$$\sqrt{80} = k\sqrt{5}$$

A 16
 B 8
 C 4
 D 2

59

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

Find k

$$\sqrt{108} = k\sqrt{3}$$

A 36
 B 27
 C 9
 D 6

60

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....