

Subtract two surds

Maths

Mr Chan



Subtract two surds

1. State whether each is true or false.

a) $\sqrt{7} - \sqrt{4} = \sqrt{3}$

b) $3\sqrt{5} - \sqrt{5} = 2\sqrt{5}$

c) $5\sqrt{3} - 2\sqrt{3} = 3\sqrt{3}$

d) $\sqrt{16} - \sqrt{9} = \sqrt{7}$

e) $6\sqrt{7} - 2\sqrt{7} = 4\sqrt{7}$

Write the correct answer for any false statements.

2. Simplify

a) $4\sqrt{3} - 2\sqrt{3}$

b) $7\sqrt{5} - 6\sqrt{5}$

c) $4\sqrt{17} - 2\sqrt{17}$

d) $8\sqrt{2} - 2\sqrt{2}$

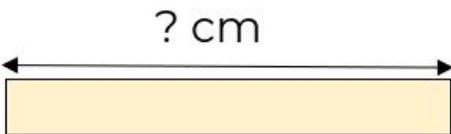
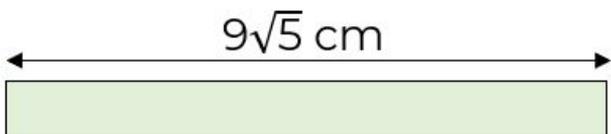
e) $14\sqrt{5} - 3\sqrt{5} - 3\sqrt{5}$

f) $2\sqrt{2} - 8\sqrt{2}$



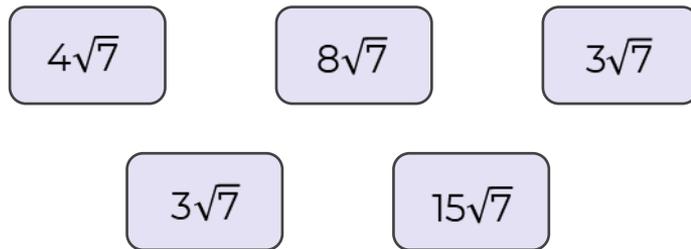
Subtract two surds

3. Here are two bars. The smaller bar is $3\sqrt{5}$ cm shorter than the longer bar.



Work out the length of the shorter bar.

4. Here are some number cards.



Work out

- the mode of the cards.
- the median of the cards.
- the range of the cards.



Answers



Subtract two surds

1. State whether each is true or false.

a) $\sqrt{7} - \sqrt{4} = \sqrt{3}$ False ($\sqrt{7} - 2$)

b) $3\sqrt{5} - \sqrt{5} = 2\sqrt{5}$ True

c) $5\sqrt{3} - 2\sqrt{3} = 3\sqrt{3}$ True

d) $\sqrt{16} - \sqrt{9} = \sqrt{7}$ False (1)

e) $6\sqrt{7} - 2\sqrt{7} = 4\sqrt{7}$ True

Write the correct answer for any false statements.

2. Simplify.

a) $4\sqrt{3} - 2\sqrt{3} = 2\sqrt{3}$

b) $7\sqrt{5} - 6\sqrt{5} = \sqrt{5}$

c) $4\sqrt{17} - 2\sqrt{17} = 2\sqrt{17}$

d) $8\sqrt{2} - 2\sqrt{2} = 6\sqrt{2}$

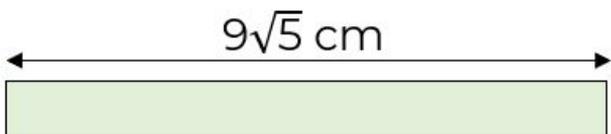
e) $14\sqrt{5} - 3\sqrt{5} - 3\sqrt{5} = 8\sqrt{5}$

f) $2\sqrt{2} - 8\sqrt{2} = -6\sqrt{2}$



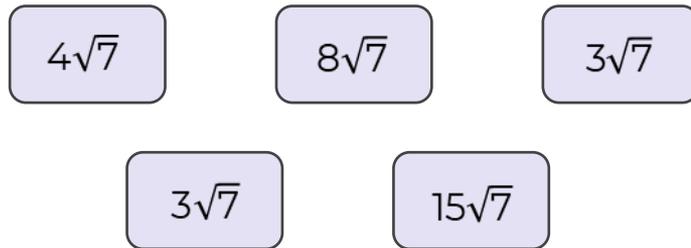
Subtract two surds

3. Here are two bars. The smaller bar is $3\sqrt{5}$ cm shorter than the longer bar.



Work out the length of the shorter bar. $6\sqrt{5}$ cm

4. Here are some number cards.



Work out

- the mode of the cards. $3\sqrt{7}$
- the median of the cards. $4\sqrt{7}$
- the range of the cards. $12\sqrt{7}$

