

# Add two surds

## Worksheet

Maths

Mr Chan



## Add two surds

1. State whether each is true or false.

a)  $\sqrt{5} + \sqrt{7} = \sqrt{12}$

b)  $\sqrt{5} + \sqrt{5} = 2\sqrt{5}$

c)  $\sqrt{9} + \sqrt{3} = 3\sqrt{3}$

d)  $4\sqrt{3} + 2\sqrt{3} = 6\sqrt{3}$

e)  $2\sqrt{7} + 5\sqrt{7} + 3\sqrt{7} = 10\sqrt{7}$

2. Simplify

a)  $\sqrt{3} + 2\sqrt{3}$

b)  $3\sqrt{5} + 2\sqrt{5}$

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

d)  $5\sqrt{2} + 3\sqrt{2}$

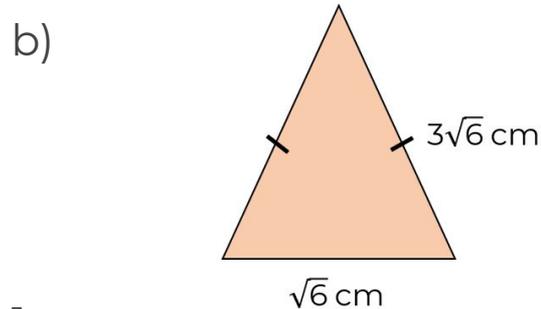
e)  $4\sqrt{5} + 3\sqrt{5} + 6\sqrt{5}$

Write the correct answer for any false statements.

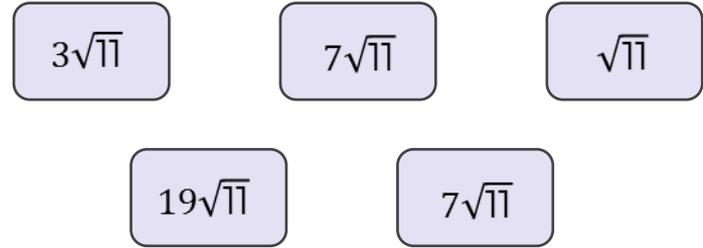


## Add two surds

3. Work out the perimeter of each shape.



4. Here are some number cards.



Work out

- the mode of the cards
- the median of the cards
- the total of the cards



# Answers



## Add two surds

1. State whether each is true or false.

a)  $\sqrt{5} + \sqrt{7} = \sqrt{12}$  False

b)  $\sqrt{5} + \sqrt{5} = 2\sqrt{5}$  True

c)  $\sqrt{9} + \sqrt{3} = 3\sqrt{3}$  False

d)  $4\sqrt{3} + 2\sqrt{3} = 6\sqrt{3}$  True

e)  $2\sqrt{7} + 5\sqrt{7} + 3\sqrt{7} = 10\sqrt{7}$  True

2. Simplify

a)  $\sqrt{3} + 2\sqrt{3} = 3\sqrt{3}$

b)  $3\sqrt{5} + 2\sqrt{5} = 7\sqrt{5}$

c)  $4\sqrt{17} + 2\sqrt{17} = 6\sqrt{17}$

d)  $5\sqrt{2} + 3\sqrt{2} = 8\sqrt{2}$

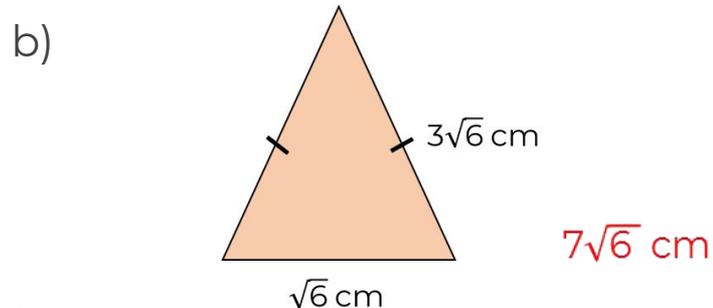
e)  $4\sqrt{5} + 3\sqrt{5} + 6\sqrt{5} = 13\sqrt{5}$

Write the correct answer for any false statements.  $\sqrt{5} + \sqrt{7}$  and  $3 + \sqrt{3}$

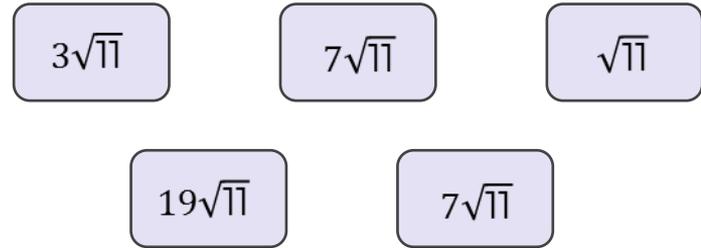


## Add two surds

3. Work out the perimeter of each shape.



4. Here are some number cards.



Work out

- a) the mode of the cards  $7\sqrt{11}$
- b) the median of the cards  $7\sqrt{11}$
- c) the total of the cards  $37\sqrt{11}$

