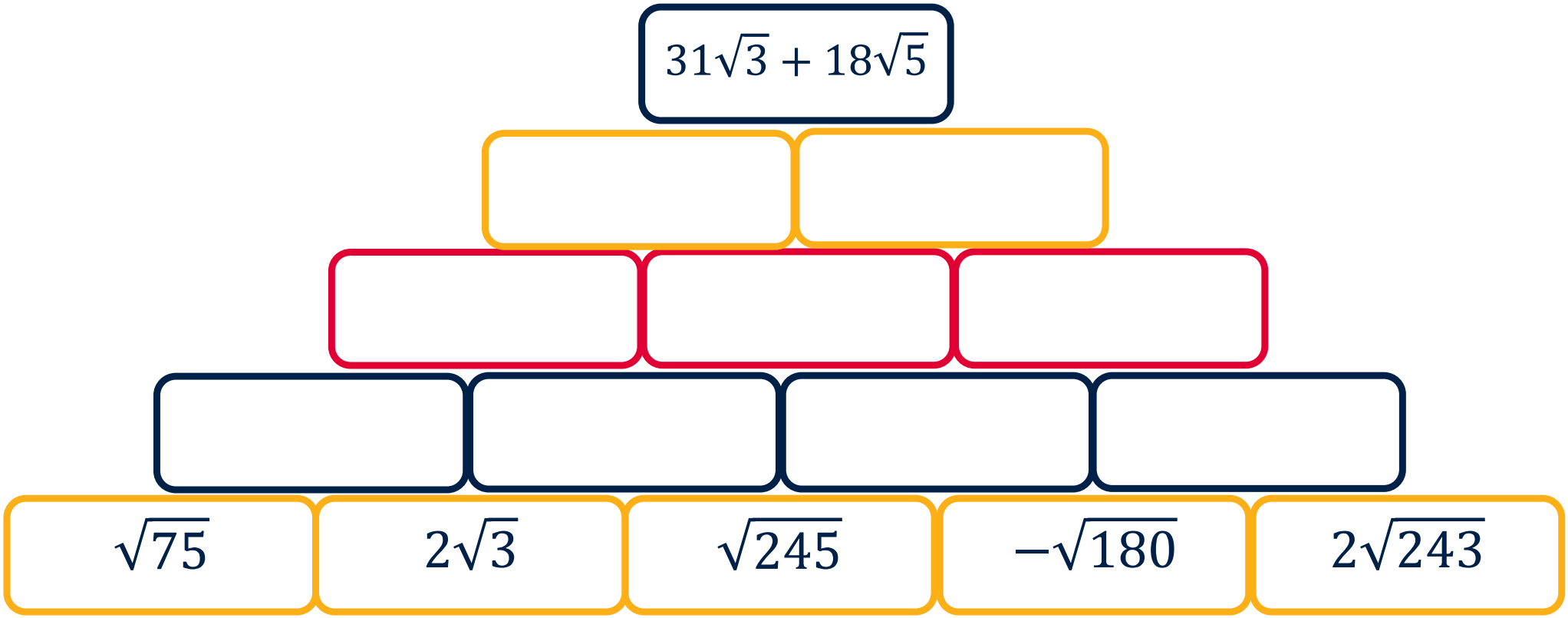
Another brick in the wall

Complete the empty boxes in the pyramid.
Each box is the sum of the two boxes directly below it.



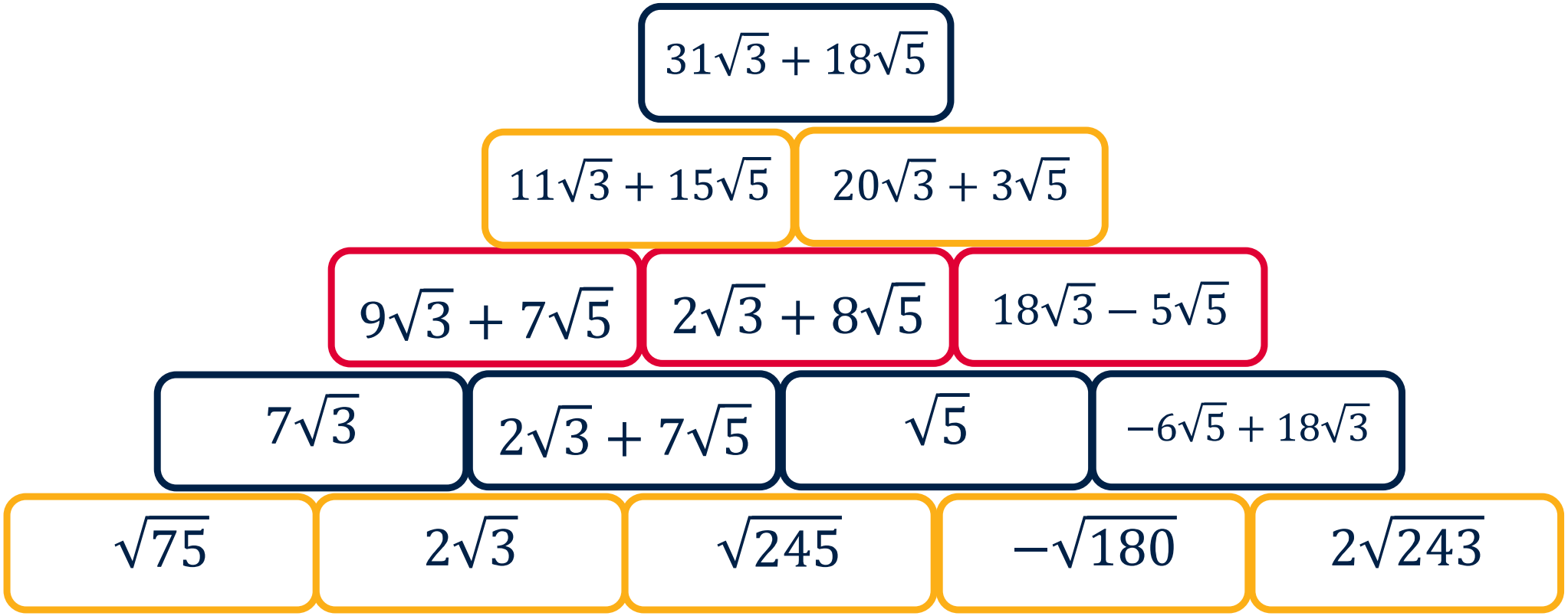
*Hint: You may need to simplify some of the surds in the bottom row to get started.

Another brick in the wall

Solutions on the next slide….

Another brick in the wall Solutions

Complete the empty boxes in the pyramid.
Each box is the sum of the two boxes directly below it.



True or False?

Decide if each of the following expressions is True or False

1. $\sqrt{9} + \sqrt{4} = \sqrt{13}$
2. $\sqrt{a} \times \sqrt{b} = \sqrt{c}$
3. $\sqrt{(8)^2} = 8$
4. $10\sqrt{2} = 5\sqrt{8}$
5. $\dfrac{\sqrt{12} \times \sqrt{3}}{\sqrt{9}} = 2$
6. $\sqrt{2}^3 = 2\sqrt{2}$
7. $\sqrt{ab}^2 = ab$
8. $2\sqrt{100} = \sqrt{200}$

Are there any statements that are sometimes true but not always true?
Can you explain why?

True or False?

Solutions on the next slide….

True or False? Solutions

Decide if each of the following expressions is True or False

1. $\sqrt{9}+\sqrt{4}=\sqrt{13}$ False → $\sqrt{9}=3\ and\ \sqrt{4}=2$
   $3+2=5\ and\ \sqrt{13}\neq 5$

2. $\sqrt{a}\times\sqrt{b}=\sqrt{c}$
   True → when a x b = c e.g. a=5, b=6, c=30
   False → otherwise

3. $\sqrt{(8)^2}=8$ True → $\sqrt{(8)^2}=\sqrt{64}=8$

4. $10\sqrt{2}=5\sqrt{8}$ True →
   $10\sqrt{2}=\sqrt{100}\times\sqrt{2}=\sqrt{200}$
   $5\sqrt{8}=\sqrt{25}\times\sqrt{8}=\sqrt{200}$

True or False? Solutions

Decide if each of the following expressions is True or False

5. $\dfrac{\sqrt{12}\times\sqrt{3}}{\sqrt{9}}=2$ True → $\dfrac{\sqrt{12}\times\sqrt{3}}{\sqrt{9}}=\dfrac{\sqrt{36}}{\sqrt{9}}=\sqrt{\dfrac{36}{9}}=\sqrt{4}$

6. $\sqrt{2}^3=2\sqrt{2}$ True → $\sqrt{2}^3=\sqrt{2}\times\sqrt{2}\times\sqrt{2}$
$=\sqrt{4}\times\sqrt{2}=2\sqrt{2}$

7. $\sqrt{ab}^2=ab$ True → $\sqrt{ab}^2=\sqrt{ab}\times\sqrt{ab}=ab$

8. $2\sqrt{100}=\sqrt{200}$ False → $2\sqrt{100}=\sqrt{4}\times\sqrt{100}=\sqrt{400}$