

# Dinosaur algebra

This task is about using algebraic equations.



a) A triceratops weighed four times as much as a stegosaurus. Together they weighed 15 tonnes. Here is an equation describing their total weight.

$$x + 4x = 15$$

i) What does the  $x$  in the equation stand for?

- |   |  |
|---|--|
| <input type="radio"/> The weight of the triceratops.                      | <input type="radio"/> The weight of the stegosaurus.         |
| <input type="radio"/> The number of dinosaurs.                            | <input type="radio"/> The total weight of the two dinosaurs. |
| <input type="radio"/> The difference in weight between the two dinosaurs. |  |

ii) What is the weight of the stegosaurus?

- |                               |                                |                                |                                 |                                 |
|-------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|
| <input type="radio"/> 1 tonne | <input type="radio"/> 3 tonnes | <input type="radio"/> 4 tonnes | <input type="radio"/> 12 tonnes | <input type="radio"/> 15 tonnes |
|-------------------------------|--------------------------------|--------------------------------|---------------------------------|---------------------------------|



A brontosaurus weighed 3 times as much as a triceratops. Together they weighed 48 tonnes. The equation shows their total weight.

$$y + \boxed{?} y = 48$$

To complete the equation correctly, what number should be in the box above?

- |                         |                         |                         |                         |                         |
|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| <input type="radio"/> 1 | <input type="radio"/> 2 | <input type="radio"/> 3 | <input type="radio"/> 4 | <input type="radio"/> 8 |
|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|