Balanced calculations

Discuss the meaning of the = sign. Establish that whatever is on one side of the sign needs to be equal to whatever is on the other side. Show the children a pair of balance scales and demonstrate by getting five identical objects and putting three on one side and two on the other. The scales are not balanced; they are not equal.

Display 7 x 6 = 11 + □ .

Clearly 7 x 6 does not equal 11, so this calculation does not yet balance. Something needs to be done to the 11.

Display the completed sum 7 x 6 = 11 + 31. Complete several examples together and then start to move the position of the missing number.

The position that causes most errors is 32 ÷ 8 = □ x 2. Explain that people who do not understand these calculations put 32 + 8 = 4 x 2.

Ask the child/ren to spot the error and to explain why it has happened. Solve together 32 + 8 = □ x 2. Since 32 ÷ 8 = 4, then □ x 2 must also equal 4, so the missing number is 2.