

## Linear Equations 1 (revision from Year 7)

### Starter

1. **(Review of last lesson)** The formula for the area of a trapezium,  $A$ , is given by

$$A = \frac{1}{2}(a + b)h. \text{ Find the area when } a = 4, b = 6 \text{ and } h = 3.$$

**Working:**  $A = \frac{1}{2}(a + b)h = \frac{1}{2}(4 + 6)3 = 15$

2. Match each operation with its opposite operation:

Addition	Square root	Division	Cube
Cube root	Multiplication	Subtraction	Square

**Working:** Addition — Subtraction  
 Multiplication — Division  
 Square — Square root  
 Cube — Cube root

3. **(Review of Y7 material)**

Evaluate: (a)  $5 - 18$  (b)  $-4 - 17$   
 (c)  $-9 \times 6$  (d)  $56 \div -7$

**Working:** (a)  $5 - 18 = -13$  (b)  $-4 - 17 = -21$   
 (c)  $-9 \times 6 = -54$  (d)  $56 \div -7 = -8$

**E.g. 1** Solve: (a)  $x + 7 = 12$  (b)  $x - 6 = 14$  (c)  $3x = 18$  (d)  $\frac{x}{9} = 4$

**Working:** (a)  $x + 7 = 12$   
 $x = 12 - 7$  *opposite operation of addition is subtraction*  
 $x = 5$

(b)  $x - 6 = 14$   
 $x = 14 + 6$  *opposite operation of subtraction is addition*  
 $x = 20$

(c)  $3x = 18$   
 $x = \frac{18}{3}$  *opposite operation of multiplication is division*  
 $x = 6$

(d)  $\frac{x}{9} = 4$   
 $x = 9 \times 4$  *opposite operation of division is multiplication*  
 $x = 36$

**N.B.** The middle step could be missed out in each of these questions.

**Video:** [Solving linear equations](#)

[Solutions to Starter and E.g.s](#)

### Exercise

p14 Ex 12.3 Qu 1ace..., 2ace..., 3ace..., 4, 5

[Textbook answers \(only available during a lockdown\)](#)