Forming measurement expressions

Mana Maths

Te reo Māori terms

kīanga
expression
Open in Te Aka

rūnā
simplify
Open in Te Aka

taurangi
variable
Open in Te Aka

Forming measurement expressions — Foundation

1. Write the perimeter of a square with side s cm.

2. Write the area of a rectangle with length l and width w.

3. Write the perimeter of a rectangle with length l and width w.

4. Write the total length of n ribbons, each 15 cm long.

5. Write the mass of b boxes if each has mass 4 kg.

6. Write the capacity of j bottles if each holds 2 L.

7. Write the cost of m metres of rope at 3 dollars per metre.

8. Write the perimeter of an equilateral triangle with side x cm.

9. Write the distance travelled in t hours at 60 km/h.

10. Write the area of a square with side a cm.

11. Write the volume of a cube with edge x cm.

12. Write the total mass of a 7 kg bag and a p kg bag.

13. Write the perimeter of a pentagon with all sides k cm.

14. Write the total length of r pieces, each 8 cm long.

Forming measurement expressions — Proficient

1. A rectangle has length $x + 3$ and width x. Write its perimeter.

2. A rectangle has length $w + 5$ and width w. Write its area.

3. A square has side $y + 2$. Write its perimeter.

4. A path has n stones, each 0.4 m long. Write its total length.

5. One carton holds c L and another holds 2 L more. Write the total capacity.

6. A runner travels at v km/h for 3 hours. Write the distance.

7. A cuboid has length l, width w, height 10. Write its volume.

8. A wire frame has 6 pieces of length p and one extra piece of 12. Write the total length.

9. An equilateral triangle has side $a + 1$. Write its perimeter.

10. A tank starts with 40 L and fills at r L/min for m minutes. Write the final amount.

11. A student writes the perimeter of sides x and $x+4$ as $2x+4$. Write the correct expression.

12. A square has area $s \times s$. Write a simplified expression.

Forming measurement expressions — Excellence

1. A rectangle has length $x + 2$ and width $x - 1$. Write a simplified perimeter.

2. A rectangle has length $3y$ and width $y + 4$. Write a simplified perimeter.

3. A square has side $2a + 1$. Write a simplified perimeter.

4. An equilateral triangle has side $t + 5$. Write a simplified perimeter.

5. A cuboid has length x, width $x + 1$, height 4. Write its volume.

6. A tank starts with 25 L and fills at $3n$ L/min for m minutes. Write the amount after m minutes.

7. A return trip is twice the one-way distance $d + 7$. Write a simplified total distance.

8. Two rows use k and $k + 3$ tiles. Each tile is 0.5 m long. Write the total row length.

9. A student writes a rectangle perimeter as $2l + w$. What is missing? Write the correct expression.

10. A square and an equilateral triangle both have side p. Write the difference between their perimeters.

11. A cube has edge $n + 2$. Write the total length of all 12 edges.

12. A roll is cut into x pieces of 2.5 m and 3 extra pieces of 1 m. Write the total length used.

13. A runner travels at 8 km/h for h hours, then 2 more hours. Write a simplified distance.

14. A rectangle has width w and length $w + 6$. Write one perimeter expression and one equivalent simplified form.

15. The area of a rectangle is $x(x + 4)$. What could the side lengths be?

16. A prism has cross-sectional area A and length l. Write its volume and say what each variable means.