

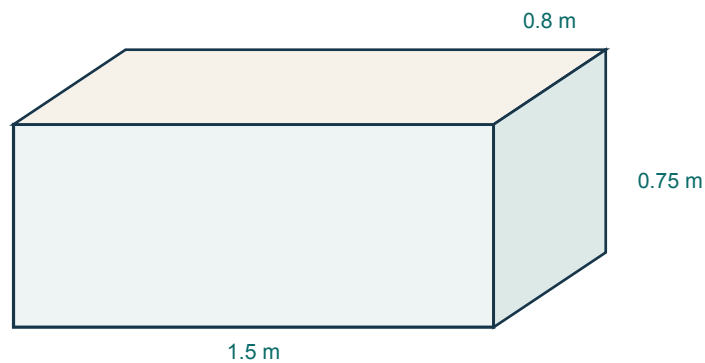
INDEPENDENT PRACTICE MATERIAL

Worksheet 3: Household water

US 32406 | 7 items | Untimed | Use a ruler, blank paper and standard calculator as needed.

QUESTION 3 | Household water

- 3(a)** A rectangular rainwater tank has internal dimensions 1.5 m by 0.8 m by 0.75 m. One cubic metre equals 1,000 litres.



How many litres does the tank hold when full?

 litres

- 3(b)** A shower uses 7.5 litres of water per minute. Three people each take an 8-minute shower.

How many litres of water are used altogether?

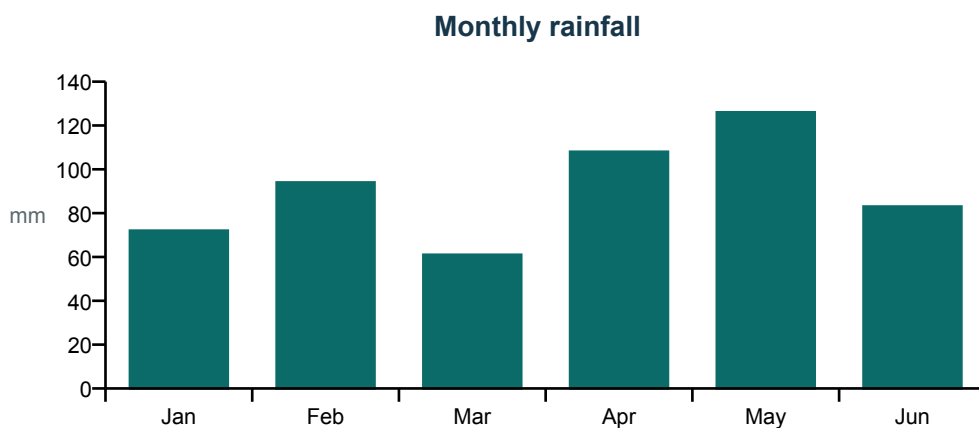
 litres

- 3(c)** An old toilet uses 9 litres for each flush. A replacement uses 6 litres for each flush.

What is the percentage reduction in water used per flush? Round to the nearest whole percent.

 %

- 3(d) The chart shows monthly rainfall. A notice says, 'Rainfall was higher in every autumn month, March to May, than in either January or February.'



Is the notice correct? Use values from the chart to explain your answer.

Write your explanation below.

- 3(e) A full tank contains 900 litres. A household plans to use 75 litres each day. The rule $V = 900 - 75d$ gives the volume V , in litres, left after d days.

How many litres are left after 6 days?

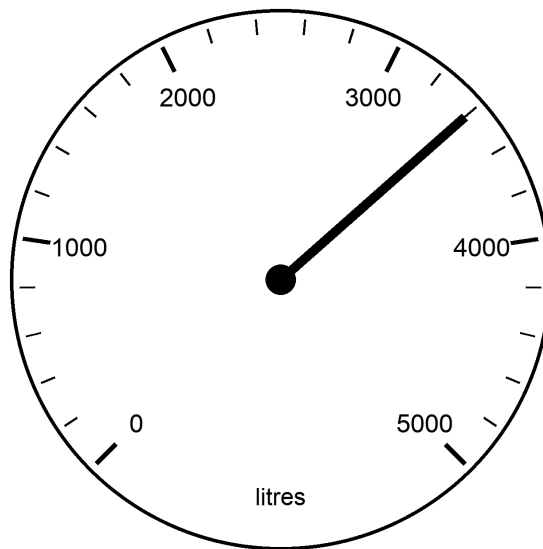
 litres

- 3(f) A household has 750 litres of stored water. It expects to use 110 litres each day. No rain is forecast for 7 days.

Is there enough stored water for all 7 days? Show how you worked out your answer.

Write your explanation below.

- 3(g)** A second rainwater tank holds 5,000 litres when full. The gauge shows the water in it now.



How many more litres are needed to fill this tank?

litres