

ELEVATOR PUZZLERS

A visit to the Super Camp Store is on the schedule for today. Sam and Basha will ride the elevator to the right floors for their supplies. Pay attention to the labels by the buttons, and use integers to solve these elevator problems.

Write and solve an integer problem for each question.

- They leave the camera floor, ride up two floors, and down three. What floor are they on?

- They leave the shoe & boot department and ride up ten floors. What floor are they on?

- What is on the floor that is twice the distance from ground floor as the camera floor?

- They leave the repair shop, ride up eight floors, and down one. What kind of merchandise will they find here?

- To go from the tent department to the repair shop, how many floors must they travel?

- What merchandise is on the floor that is 9 floors above the floor with kids' supplies?

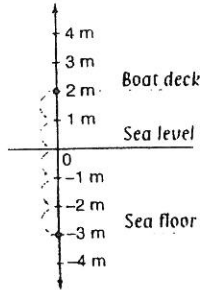
- What is on the floor that is one below the floor that is four floors above shoes & boots?

- They leave the clothing floor, ride down 3 floors, up 8 floors, and down two. What kind of merchandise will they find here?



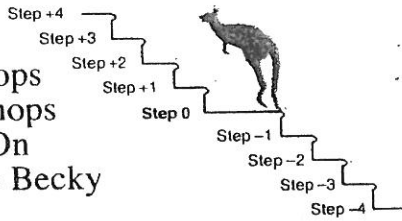
Q. A scuba diver jumps from a deck of a boat 2 m above the sea level and touches the sea floor 3 m below the sea level. How far below the deck is the sea floor?

A. 5 m Use a vertical number line.



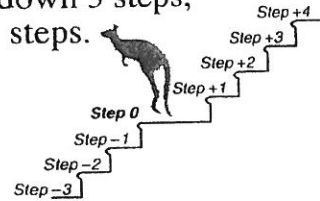
Locate 2 m above the sea level on the line.
 Locate 3 m below the sea level (-3 m) on the line.
 Count how many meters (units) are between the two points.
 This is the same as adding 2 and 3
 $2 + 3 = 5$.

a) Starting on step 0, Becky, the kangaroo, hops up 1 step, then hops down 4 steps. On which step does Becky finish?



Step -3

b) Starting on step 0, Warwick, the wallaby, hops down 3 steps, then hops up 5 steps. On which step does Warwick finish?



c) Which temperature is the lowest:
 A) 3°C above zero,
 B) 10°C below zero or
 C) 9°C below zero?

d) Which altitude is the highest:
 A) 180 m below sea level,
 B) 1 m above sea level or
 C) 27 m below sea level?

e) Which temperature is the highest:
 A) 15°C below zero,
 B) 8°C below zero or
 C) 3°C below zero?

f) Which company recorded the worst quarterly results:
 Company A: \$0.6 M loss,
 Company B: \$1.2 M loss or
 Company C: \$1.5 M profit?

g) Cleopatra was born in 69 B.C. She followed Caesar to Rome in 46 B.C. How old was she then?

h) The water in the Snake River rises from -2 m below the marker to $+8$ m. How much deeper is the river after the rise?

m