

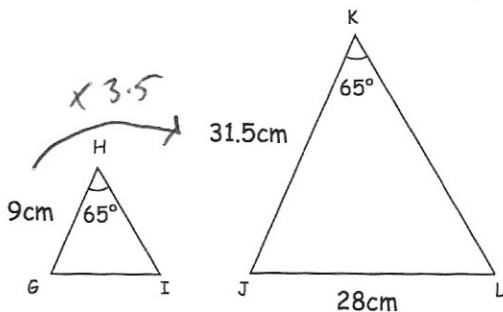


In 2012 the number of golfers in a club is 450.

In 2014 the number of golfers was 520.

Work out the percentage increase.

$$\frac{70}{450} \times 100 = 15.5\%$$



Triangles GHI and JKL are similar.

Work out the length of GI.

$$28 \div 3.5 = 8\text{cm}$$

Darius organises his books into groups of 36.

He then organises them into groups of 30.

What is the smallest possible number of books that Darius has.

30	60	90	120	150	180
36	72	108	144	180	

180

Jack is 10 years old.

Eva is 17 years old.

Sofia is 23 years old.

Eva and Sofia share £16 in the ratio of their ages.

Eva gives 20% of her share to Jack.

$$17 + 23 = 40$$

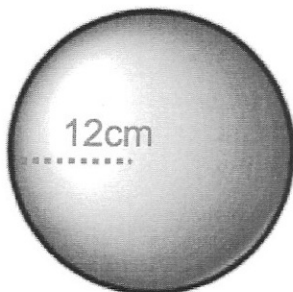
How much money does Jack receive?

$$1600 \div 40 = 40$$

$$40 \times 17 = £6.80$$

$$40 \times 23 = £9.20$$

$$20\% \text{ of } £6.80 = £1.36$$



A sphere has a radius of 12cm.

Calculate the volume of the sphere.

Give your answer to 1 decimal place.

$$\frac{4}{3} \pi r^3 = \frac{4}{3} \times \pi \times 12^3 = 7238.2\text{cm}^3$$