



Prove the product of two even numbers is always even

Given

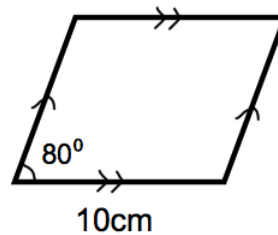
$$f(x) = \frac{4x + 1}{7}$$

find

$$f^{-1}(x)$$

Shown is a rhombus

Calculate its area



Olivia has a fair 4 sided dice and two boxes of sweets.

The dice is labelled A, B, C and D.

Box 1 contains 7 red and 3 green sweets.

Box 2 contains 1 green and 4 red sweets.

Olivia rolls the dice and if she gets an A, she picks a sweet at random from Bag 1.

If she rolls a B, C or D, then Olivia picks a sweet at random from Bag 2.

Show this information on a tree diagram.

Olivia rolls the dice and picks a sweet at random. Olivia obtained a green sweet.

Find the probability that Olivia rolled an A on the dice.