



The ratio of red cards to black cards in a deck is 2:3

Two thirds of the red cards are removed and 8 more black cards are added.

The ratio of red cards to black cards is now 1:5

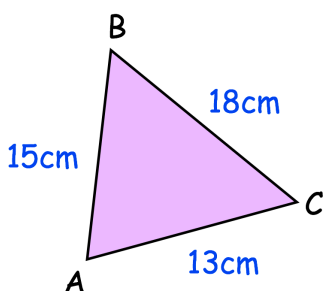
Work out the number of red cards now in the deck.

Show that $(\sqrt{2} + 3\sqrt{8})^2 = 98$

Prove that when two consecutive integers are squared, that the difference is equal to the sum of the two consecutive integers.

$$(ax + 1)(x - 3)(x + b) \equiv 2x^3 - 3x^2 - 8x - 3$$

Find the values of a and b



Find the size of the largest angle in this triangle.