M8 =6 days to go!

6 Joe was changing the subject of the formula

$$A = \frac{3b}{\sqrt{c}} \qquad \text{to } c$$

Joe has written $A = \frac{3b}{\sqrt{c}}$

Line 1 $A^2 = \frac{3b^2}{c}$

Line 2 $A^2c = 3b^2$

Line 3 $c = \frac{3b^2}{A^2}$

(a) Identify the line where Joe made a mistake.

Answer line _____ [1]

(b) Write down the correct answer:

Answer $c =$ _____ [1]

Convert $0.3\dot{4}$ to a fraction.
Give your answer in its simplest form.

.....

(3)

Evaluate

$$\left(\frac{49}{100}\right)^{-\frac{1}{2}}$$

.....

(2)

A is directly proportional to B^2
When A = 50, B = 5

(a) Find a formula for A in terms of B.

(b) Find the value of A when B = 3

(c) Find the value of B when A = 200