

17. Convert the recurring decimal  $0.\dot{3}2$  to a fraction.

May 04 4H

Q17

.....  
(Total 2 marks)

19. Convert  $0.5\dot{1}$  to a fraction.

May 05 4H

Leave  
blank

.....  
(Total 2 marks)

Q19

19. Convert the recurring decimal  $0.\dot{2}3$  to a fraction.

Nov 06 4H

.....  
(Total 2 marks)

Q19

NOV 08 24

17. (a) Convert the recurring decimal  $0.\dot{7}$  to a fraction.

.....  
(2)

$0.0\dot{y}$  is a recurring decimal.  
 $y$  is a whole number such that  $1 \leq y \leq 9$

(b) (i) Write the recurring decimal  $0.0\dot{y}$  as a fraction.

.....

(ii)  $0.1\dot{y}$  is also a recurring decimal.  
 Using your answer to part (i), or otherwise, convert the recurring decimal  $0.1\dot{y}$  to a fraction.  
 Give your answer as simply as possible.

.....  
(3)

(Total 5 marks)

Q17

May 06 3H

17. Michael says "When the fraction  $\frac{n}{45}$  is converted to a decimal, it never gives a terminating decimal."

(a) (i) Find a value of  $n$  which shows that Michael is wrong.

$n = \dots\dots\dots$

(ii) Write down the name of the type of number  $n$  must be, when  $\frac{n}{45}$  gives a terminating decimal.

$\dots\dots\dots$   
(2)

(b)  $\frac{62}{45} < \sqrt{2} < \frac{64}{45}$

Use these bounds to write the value of  $\sqrt{2}$  to an appropriate degree of accuracy. You must show your working and explain your answer.

$\dots\dots\dots$   
(2)

(Total 4 marks)

Q17

