(a) Using a calculator, or otherwise, calculate the EXACT value of

(i)
$$\frac{1\frac{4}{5} - \frac{1}{3}}{2\frac{2}{5}} =$$
 (2 marks)

(ii)
$$\sqrt{1.5625} + (0.32)^2$$
. (2 marks)

(b) Given that $f(x) = \frac{2x+1}{3}$ and g(x) = 4x + 5, determine the values of:

(3 marks)

(ii)
$$f^{-1}(3)$$

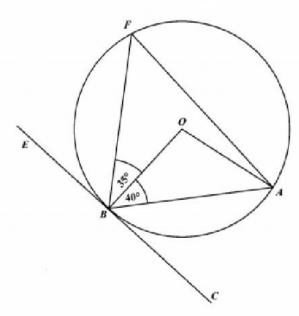
(3 marks)

(a) The incomplete table below shows one pair of values for A and R where A is directly proportional to the square of R.

A	36		196
R	3	5	

Complete the table above.

(a) The diagram below, **not drawn to scale**, shows a circle with centre O. EBC is a tangent to the circle. $\langle OBA = 40^{\circ} \text{ and } \langle OBF = 35^{\circ} \rangle$.



Calculate, giving reasons for your answer, the measure of

- (i) <EBF (1 mark)
- (ii) <BOA (2 marks)
- (iii) <AFB (2 marks)
- (iv) <OAF. (2 marks)