

QUESTION 1.5

(a) $r = 0.01924$

(AI)

(CI)

Note: Accept 0.0192 and 0.019

(b) $r = 1.924 \times 10^{-2}$

(AI)(ft)(AI)(ft)

(C2)

Notes: Award (AI) for 1.924, (AI) for 10^{-2}
Accept 1.92 and 1.9
Follow through from their part (a).

(c)

$c \in \mathbb{N}$
$d \in \mathbb{Z}$
$d \in \mathbb{Q}$
$r < d$
$c + d \in \mathbb{R}$
$\frac{1}{r} > c$

(AI)(AI)(AI)

(C3)

Notes: Award (AI) for each true statement circled.
Do not follow through from part (a).
Award (AI)(AI)(A0) if 1 extra term seen.
Award (AI)(A0)(A0) if 2 extra terms seen.
Award (A0)(A0)(A0) if all terms circled.
Accept other indications of the correct statements i.e. highlighted or ticks.

[6 marks]