

MTH 309

Additional Problems for Section 4.1

1. Evaluate these quantities (recall in the textbook, $[a]_m$ is denoted by $a \bmod m$):

(a) $[45]_4$

(b) $[144]_7$

(c) $[-20]_3$

(d) $[-101]_{13}$

2. True or False (justify your answer):

(a) $37 \equiv 3 \pmod{7}$

(b) $73 \equiv 3 \pmod{7}$

(c) $-24 \equiv 1 \pmod{5}$

(d) $35 \equiv -5 \pmod{8}$