

Exercise 3.7 (page 51)

- 1 7.04×10^8 2 2.04×10^6
3 6.95×10^7 4 2.2×10^5
5 6×10^{17} 6 4.2×10^{14}
7 5×10^2 8 7.5×10^8
9 150 000 000 10 2.98×10^{-5}
11 5.76×10^2 12 8×10^7
13 2.25×10^{14} 14 1.65×10^{10}
15 1.87×10^{11}
16 a) 2×10^n b) $6.4 \times 10^{6n+1}$
17 4 hours and 4 minutes

Exercise 3.8 (page 53)

- 1 2, 3, 5, 7, 11, 13, 17, 19, 23, 29, 31, 37
2 a) 4 b) 37
 c) 13 and 31 d) 7×13
3 a) $2^4 \times 5$ b) $2 \times 3^2 \times 5$
 c) $2 \times 3^2 \times 5^2$
4 a) $2^2 \times 3^2$ b) 3^4
 c) $2^4 \times 3^2$
 All use an even number of each factor
5 a = 3, b = 7