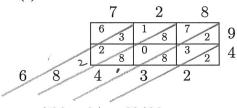
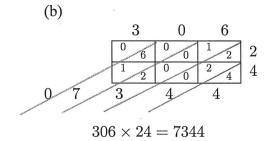
Ex. 3.4A





$$728 \times 94 = 68432$$



$$323_5 \times 42_5 = 30221_5$$

Ex. 3.5A

13. (a)
$$32_5 \times 4_5 = 233_5$$

(c)
$$43_6$$
 $\times 23_6$

$$213_6$$

$$1300_6$$

$$1513_6$$

(e)
$$\begin{array}{r}
110_{2} \\
11_{2} \overline{\smash{\big)}\ 10010_{2}} \\
\underline{11_{2}} \\
110_{2} \\
\underline{110_{2}} \\
0_{2}
\end{array}$$

$$10010_{2} \div 11_{2} = 110_{2}$$

(b)
$$4_{5} \overline{\smash) 32_{5}} \\ \underline{31_{5}} \\ \underline{1_{5}} \\ 32_{5} \div 4_{5} = 4_{5} \, R \, 1_{5}$$

(d)
$$3_{5}) \overline{143_{5}}
140_{5}
3_{5}
\underline{3_{5}}
0_{5}
143_{5} \div 3_{5} = 31_{5}$$

Ex. 3.5B

- 1. (a) $48 \div x = 16$ can be written as $x \times 16 = 48$.
 - (b) $x \div 5 = 17$ can be written as $5 \times 17 = x$.
- 6. (a) $6 \div 2 \neq 2 \div 6$ so division is not commutative over the whole numbers.
 - (b) $6-2 \neq 2-6$ so subtraction is not commutative over the whole numbers.
- 9. (a) The greatest quotient must have the smallest divisor and largest dividend, so we need 3) 876.
 - (b) The smallest quotient must have the largest divisor and smallest dividend, so we need $8) \overline{678}$.
- 17. Cost of her policy is $30 \times $24 = 720 Monthly installment $= $720 \div 12 = 60
- 18. (a) $\{x \mid x = 4k + 1 \text{ for any whole number } k\}$
 - (b) $\{1, 5, 9, 13, 17....\}$
 - (c) It is an Arithmetic Sequence with $a_1 = 1$ and d = 4.
- 19. (a) $(4+3) \cdot 2 = 14$
 - (b) $(9 \div 3) + 1 = 4$
 - (c) $(5+4+9) \div 3 = 6$
 - (d) $(3+6-2) \div 1 = 7$
- 22. (a) 200,000 is high because $400 \times 500 = 200,000$ so 398×500 must be less than 200,000.
 - (b) 10 is low because $10,000 \div 1000 = 10$ so $10,000 \div 999$ must be greater than 10.
 - (c) 20 is low because $8,000 \div 400 = 20$ so $8,001 \div 398$ must be greater than 20.
 - (d) 10 is high because $2,000 \div 200 = 10$ so $1,999 \div 201$ must be less than 10.