

**YEAR 7 TEST 3A**

**1 a**  $85 + 372 + 15$   
 $= 85 + 15 + 372$   
 $= 100 + 372$   
 $= 472$

**b** 
$$\begin{array}{r} 1213416713 \\ - \quad 586 \\ \hline 1887 \end{array}$$

**c** 
$$\begin{array}{r} 2399911 \\ - \quad 427 \\ \hline 2574 \end{array}$$

**2 a**  $68 \times 10$   
 $= 680$

**b**  $2700 \div 100$   
 $= 27$

**3 a**  $745 \times 20$   $\begin{array}{r} 745 \\ \times 2 \\ \hline 1490 \end{array}$   
 $= 745 \times 2 \times 10$   
 $= 1490 \times 10$   
 $= 14900$

**b**  $5 \times 89 \times 60$   $\begin{array}{r} 89 \\ \times 3 \\ \hline 267 \end{array}$   
 $= 5 \times 60 \times 89$   
 $= 300 \times 89$   
 $= 3 \times 89 \times 100$   
 $= 267 \times 100$   
 $= 26700$

**4 a** 
$$\begin{array}{r} 90 \\ 1000 \\ 9 \overline{) 9810} \\ \underline{-9000} \\ 810 \\ \underline{-810} \\ 0 \end{array}$$

$\therefore 9810 \div 9 = 1090$

**b** 
$$\begin{array}{r} 8 \\ 30 \\ 8 \overline{) \$304} \\ \underline{-240} \\ 64 \\ \underline{-64} \\ 00 \end{array}$$

$\therefore \$304 \div 8 = \$38$

**5 a**  $8 + 5 \times 9 - 7$   
 $= 8 + 45 - 7$  { $\times$  first}  
 $= 53 - 7$   
 $= 46$

**b**  $36 \div 4 \times 2 + 5$   
 $= 9 \times 2 + 5$  { $\div$  first}  
 $= 18 + 5$  { $\times$  next}  
 $= 23$

**6**  $6 \xrightarrow{+4} 10 \xrightarrow{\div 5} 2$   
 $16 \xrightarrow{+4} 20 \xrightarrow{\div 5} 4$   
 $26 \xrightarrow{+4} 30 \xrightarrow{\div 5} 6$   
 So,  $56 \xrightarrow{+4} 60 \xrightarrow{\div 5} 12$

and the operations are  $+ 4$  followed by  $\div 5$

**7** Factors of 40 are  
 1 and 40; 2 and 20; 4 and 10; 5 and 8

**8 a** Factors of 69 are  
 1 and 69; 3 and 23

**b** composite

**9** 36, 40, 44, 48, 52, 56, 60

**10** Multiples of 6 are:  
 6, 12, 18, (24), 30, 36, .....

Multiples of 8 are:  
 8, 16, (24), 32, 40, .....

$\therefore$  LCM of 6 and 8 is 24.

**11** Total winnings =  $23 \times \$45$

$$\begin{array}{r} 23 \\ \times 45 \\ \hline 115 \\ 920 \\ \hline 1035 \end{array} \quad \begin{array}{l} \{23 \times 5\} \\ \{23 \times 40\} \\ \{adding\} \end{array}$$

i.e., \$1035

Check: winnings  $\div 20 \times 50$   
 $\div \$1000$