End-of-unit review

1 Work these out.

a $5 + -3$ **b** $-3 - 5$ **c** $-8 + -7$ **d** $3 - 13$ **e** $-7 - 7$

2 Work these out.

a $2 - -5$ **b** $-3 - -4$ **c** $12 - -5$ **d** $-5 - -12$ **e** $-9 - -9$

3 Work these out.

a -3×-9 **b** $8 \div -4$ **c** -20×4 **d** $-30 \div -5$ **e** $-16 \div 8$

4 Copy and complete this multiplication table.

×	−2	3	5
−4			
−3			
6			30

5 Here is a number chain. Each number is the product of the previous two numbers.

$-1 \longrightarrow -2 \longrightarrow 2 \longrightarrow -4 \longrightarrow \square \longrightarrow \square$

Write down the next two numbers in the chain.

6 Find all the factors of each number.

a 42 **b** 52 **c** 55 **d** 29 **e** 64 **f** 69

7 **a** Find two prime numbers that add up to 40.
b Find another two prime numbers that add up to 40.
c Are there any more pairs of prime numbers that add up to 40? If so, what are they?

8 Write each of these numbers as a product of its prime factors.

a 18 **b** 96 **c** 200 **d** 240 **e** 135 **f** 175

9 Use your answers to question **8** to find:

a the highest common factor of 200 and 240
b the highest common factor of 135 and 175
c the lowest common multiple of 18 and 96
d the lowest common multiple of 200 and 240.

10 Find the square roots of each number.

a 25 **b** 81 **c** 169 **d** 256

11 Find the value of each number.

a $\sqrt{64}$ **b** $\sqrt[3]{64}$

12 In computing, 2^{10} is called 1K. Write down as a number:

a 1K **b** 2K **c** 4K.

13 **a** Read Shen's comment. What mistake has he made?
b Correct the statement.

3^5 and 5^3 are both equal to 15.

14 The HCF of two numbers is 6. The LCM is 72. One of the numbers is 24.
Find a possible value of the other number.