# Whole numbers, factors and powers topic test

Name: _____ Date: _____

15 questions | 32 marks | 45 minutes

A progressive by-hand review of place value, calculations, factors, powers and estimates.

No calculator needed.

**1.** What is the value of the 6 in 3,642,015? [1 mark]

**2.** Write 4,000 + 70 + 9 as one whole number. [1 mark]

**3.** Evaluate $6 \times 10^4$. [1 mark]

**4.** Evaluate $18 + 24 \div 6$. [2 marks]

**5.** Evaluate $(20 - 8) \times 3$. [2 marks]

**6.** List every positive factor pair of 45. [3 marks]

**7.** Is 49 prime? Give a reason. [2 marks]

**8.** Find the highest common factor of 18 and 42. [2 marks]

**9.** Find the lowest common multiple of 8 and 12. [2 marks]

**10.** Write 90 as a product of prime powers. [3 marks]

**11.** Evaluate $\sqrt{225}$. [1 mark]

**12.** A square has area 144 square centimetres. Find its side length and perimeter. [4 marks]

**(a)** Find the side length. [2 marks]

**(b)** Find the perimeter. [2 marks]

**13.** Round 4,970 to the nearest hundred. [1 mark]

**14.** Estimate $39 \times 202$ using convenient whole numbers. [2 marks]

**15.** A trip takes 96 students. Each bus seats 24 students and costs 185 dollars to hire. Entry costs 7 dollars per student. Find the number of buses and the total cost. [5 marks]

**(a)** How many buses are needed? [1 mark]

**(b)** Find the total cost of bus hire. [2 marks]

**(c)** Find the total cost of bus hire and entry. [2 marks]