


1. Express this ratio in simplest form.

$600\text{ m} : 1.5\text{ km}$

[2]

1. One megabyte (MB) of computer memory contains 1,048,576 bytes.

Convert this number into scientific notation (standard form) correct to 4 significant figures. [2]

1.  The temperature in Canada at 5:00 pm is  $-6^{\circ}\text{C}$ .

It falls overnight by  $10^{\circ}\text{C}$  and warms by  $20^{\circ}\text{C}$  at 11:00 am.

Find the temperature at 11:00 am.

[2]

1. The distance around an Olympic Track is approximately 1,312 feet, correct to the nearest foot. Write down

(a) the lower bound of the actual distance around the track, [1]

(b) the upper bound of the actual distance around the track. [1]

1. A college sent out 3,150 invitations to their summer graduation.  
5,000 invitations were sent out last year.

Find the percentage decrease in invitations sent. [2]

1. From the set  $\{60, 61, 62, 63, 64, 65\}$ , write a

(a) factor of 183, [1]

(b) multiple of 7, [1]

(c) cube number. [1]

1. (a) Given that  $M = p^2q - 3p$ , find the value of  $M$  when  $p = -2$  and  $q = 3$ . [3]

(b) Make  $q$  the subject of the formula  $M = p^2q - 3p$ . [2]