

# Year 9 – Set Three

Name ..... Date .....

Use a calculator to help answer these questions.

**1**

If  $z = -8$ , what is the value of  $4z$ ?

-48

32

-4

-32

**2**

The men's world shot put record is held by R. Barnes. He broke U. Timmermann's record by 0.06 m in 1990. Timmermann set his world record by throwing 0.15 m further than A. Andrei's former world record of 22.91 m in 1988.

What is Barnes's present world men's shot put record?

22.985 m

23.06 m

23.12 m

23.66m

**3**

A carton of light bulbs was dropped while being delivered. When it was opened, it was found that 45 bulbs were broken and only 27 still worked.

What percentage of the contents of the carton was broken in the accident?

37½%

45%

60%

62½%

**4**

The fraction  $\frac{3}{5}$  is

less than  $\frac{3}{4}$

more than  $\frac{2}{3}$

half as much as  $\frac{6}{10}$

halfway between  $\frac{2}{4}$  and  $\frac{4}{6}$

5

The surface areas (in  $\text{km}^2$ ) of the Great Lakes in North America are shown on this map.



What is the average surface area of these lakes?

$\text{km}^2$

6

In the formula  $F = (a - 7)^3$ , what is the value of  $F$  when  $a = 2$ ?

-125

-15

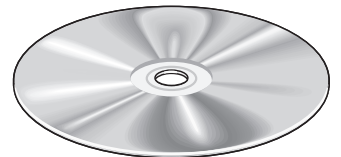
75

125

7

The diameter of this compact disc is 11.8 cm.  
The hole in the middle has an area of  $1.54 \text{ cm}^2$ .

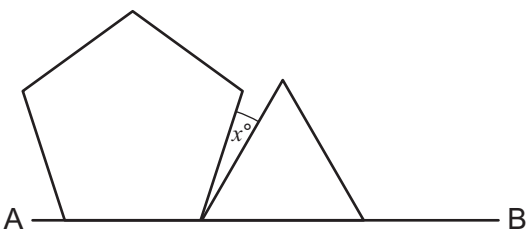
What is the area of the plastic in the disc?



$\text{cm}^2$

8

The triangle and the pentagon in this diagram are both regular polygons.  
AB is a straight line.



What is the value of  $x$ ?

- 8
- 10
- 12
- 15