

## **Quantitative Reasoning**

Activities	Price per person (£)	
	2008	2013
Rollerblading	5	7.50
Ice Skating	12	11.50
Abseiling	6.50	8.50
Rock Climbing	7	6
Snow Boarding	9	10.50

**1. How much more/ less does a family of four who want to all rock climb and rollerblade have to pay in 2013 as opposed to 2008?**

- A. £4 more
- B. £4 less
- C. £6 more
- D. £6 less
- E. £8 more

**ANSWER:**

Rollerblading:

£20 in 2008

£30 in 2013

Rock Climbing:

£28 in 2008

£24 in 2013

Overall:

2008: £48

2013: £54

**Answer: £6 more**



**2. What is the difference in percentage increase/ decrease of one person abseiling and snowboarding after the price changes?**

- A. 13.3%
- B. 14.1%
- C. 16.7%
- D. 21.3%
- E. 30.8%

**Answer:**

Percentage change of abseiling: 30.8%

Percentage change of snowboarding: 16.7%

Difference: 14.1%

**Answer: 14.1%**

**3. Which one of the activities has the highest percentage change from 2008 to 2013?**

- A. Rollerblading
- B. Ice Skating
- C. Abseiling
- D. Rock Climbing
- E. Snow Boarding

**Answer:**

Rollerblading: 50% more - **Answer**

Ice Skating: 4.16% less

Abseiling: 30.8% more

Rock Climbing: 14.3% less

Snow Boarding: 16.7% more



4. If the price of rollerblading increases at an annual constant rate between 2008 and 2013, what is the price of rollerblading for 2 people in 2012?

- A. 12
- B. 13
- C. 13.50
- D. 14
- E. 14.50

**Answers:**

$$7.50 - 5 = 2.50$$

$$2.50 / 5 = 0.50$$

$$0.50 * 4 = £2$$

$$5 + 2 = 7$$

$$7 \times 2 = 14$$

**Answer: D**

5. In 2013, 3 people wanted to go Rock Climbing, 5 abseiling and 6 snowboarding. Due to it being a large group, they got a 20% discount. What is the overall price?

- A. £90.60
- B. £98.80
- C. £108.50
- D. £123.50
- E. £130.20

**Answers:**

$$\text{Rock climbing } \times 3 = 18$$

$$\text{Abseiling } \times 5 = 42.5$$

$$\text{Snowboarding } \times 6 = 63$$

$$\text{Total} = 63 + 42.5 + 18 = £123.5$$

$$\text{After discount: } 0.8 \times 123.5 = £98.80$$

**Answer: £98.80**

