



The Scottish Parliament  
Pàrlamaid na h-Alba

# Maths - Problem Solving Answers

- 1 There are 129 MSPs. If 56 MSPs vote yes, and 3 abstain, how many vote no? (Remember the Presiding Officer doesn't vote unless there is a tie between yes and no votes).  
Answer:  $56+3=59$   $129-1$  (Presiding Officer)= $128$   $128-59=69$
- 2 There are 108 offices for MSPs in the MSP building. How many MSPs have offices elsewhere in the Parliament buildings?  
Answer:  $129-108=21$
- 3 The Presiding Officer can only vote when there is a tie between yes and no votes. If 54 MSPs vote yes and 8 abstain, how many must vote no to make the PO vote?  
Answer: **54**
- 4 All 129 MSPs are in the Garden lobby. One third leaves to go to the Debating Chamber. How many are left in the Garden Lobby?  
Answer:  $129/3=43$   $129-43=86$
- 5 At the 2011 election, 45 women were elected as MSPs. How many MSPs are men?  
Answer:  $129-45=84$
- 6 The SNP won 69 out of the 129 seats at the 2011 election. Write this as a fraction. Make it the lowest you can.  
Answer:  $69/129 = 23/43$
- 7 The MSP for Aberdeen travels by train to the Parliament in Edinburgh. He catches a train at 09:52 and the journey takes 2 hours and 33 minutes. When will he arrive in Edinburgh?  
Answer: **12:25**
- 8 5 constituents each write a letter to their 8 MSPs. How many stamps do they need altogether?  
Answer:  $5 \times 8 = 40$



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- 9 A MSP receives 100 emails a day. How many emails does the MSP get in a year?  
Answer:  $100 \times 365 = 36,500$
- 10 There are 272 lights in the chamber. If 25% weren't working how many lights would be on?  
Answer:  $272 / 4 = 68$   $272 - 68 = 204$
- 11 A debate started at 14.35. Each MSP was given 6 minutes to speak. If there were 8 speakers, what time did the debate finish?  
Answer:  $8 \times 6 = 48$  minutes  $14:35 + 48$  minutes = **15:23**
- 12 128 MSPs were in the chamber at decision time. 50% voted Yes, 25% No. How many abstained?  
Answer:  $50\% + 25\% = 75\%$   $100\% - 75\% = 25\%$  so 25% abstained.  $128 / 4 = 32$   $25\% = 32$  MSPs
- 13 A debate starts at 14:00. The first 6 speakers speak for 6 minutes each. The next 6 speak for 3 minutes each. The last speaker speaks for 6 minutes. When does the debate end?  
Answer:  $6 \times 6 = 36$ ,  $6 \times 3 = 18$   $36 + 18 + 6 = 60$  minutes so the debate ends at **15:00**
- 14 An MSP has a meeting in the Parliament at 10:00. She travels by bus to the Parliament and the journey takes 50 minutes. She then has a 15 minute walk from the bus station to the Parliament. It then takes her 5 minutes to get to the meeting room in the building. There are three bus times - 8:20, 8:50 and 9:20. Which one will get her there in time for her meeting?  
Answer: Travel time =  $50 + 15 + 5 = 70$  minutes. Counting back, the 8.50 bus will get her there on time, or she could get the 8.20 bus if she wants to be there early