

BODMAS worksheet answers

Keep separate from the learner worksheet. Accept equivalent correct methods and explanations.

Q1 $8 + 3 \times 4$ (1 mark)

Answer: 20 · Multiply first: $3 \times 4 = 12$, then add 8 to get 20.

Q2 $24 \div 6 + 5$ (1 mark)

Answer: 9 · Divide first: $24 \div 6 = 4$, then add 5 to get 9.

Q3 $18 - 12 \div 3$ (1 mark)

Answer: 14 · Divide first: $12 \div 3 = 4$, then subtract 4 from 18 to get 14.

Q4 $(8 + 3) \times 4$ (1 mark)

Answer: 44 · Calculate the brackets first: $8 + 3 = 11$, then $11 \times 4 = 44$.

Q5 $36 \div (3 \times 2)$ (1 mark)

Answer: 6 · Calculate the brackets first: $3 \times 2 = 6$, then $36 \div 6 = 6$.

Q6 $20 - (6 + 4)$ (1 mark)

Answer: 10 · Calculate the brackets first: $6 + 4 = 10$, then $20 - 10 = 10$.

Q7 $24 \div 6 \times 2$ (2 marks)

Answer: 8 · Division and multiplication share priority, so work left to right: $24 \div 6 = 4$, then $4 \times 2 = 8$.

Q8 $18 - 6 + 2$ (2 marks)

Answer: 14 · Subtraction and addition share priority, so work left to right: $18 - 6 = 12$, then $12 + 2 = 14$.

Q9 $3^2 + 4 \times 5$ (2 marks)

Answer: 29 · Calculate the order and multiplication first: $3^2 = 9$ and $4 \times 5 = 20$, then $9 + 20 = 29$.

Q10 $(5 + 1)^2 \div 9$ (2 marks)

Answer: 4 · Brackets first give 6, then the order gives $6^2 = 36$, then $36 \div 9 = 4$.

Q11 Correct the claim: $12 - 4 \times 2 = 16$. (2 marks)

Answer: 4 · Multiply first: $4 \times 2 = 8$, then $12 - 8 = 4$. The claim is incorrect.

Q12 Add brackets to make $6 + 2 \times 5$ equal 40. (2 marks)

Answer: $(6 + 2) \times 5 = 40$ · The brackets make 6 + 2 the first calculation: $8 \times 5 = 40$.

Q13 Find the missing number: $7 + \square \times 3 = 22$. (2 marks)

Answer: 5 · $22 - 7 = 15$, and $15 \div 3 = 5$, so $7 + 5 \times 3 = 22$.

Q14 Use 4, 5 and 2 once each to produce both 14 and 18. (3 marks)

Answer: $4 + 5 \times 2 = 14$; $(4 + 5) \times 2 = 18$ · Changing only the brackets changes which operation happens first.