Worksheet: We Distribute Yet Things Multiply

ISC · Class 8 · Mathematics · 8 questions · 11 marks

Name: _____	Date: _____	Score: _____ / 11

Q1. Expand $(5m + 6n)^2$. *[1 mark]*

A) $25m^2 + 60mn + 36n^2$

B) $25m^2 + 36n^2$

C) $10m^2 + 60mn + 12n^2$

D) $25m^2 + 30mn + 36n^2$

Q2. Using the identity $(a + b)(a b) = a^2 b^2$, the value of 98×102 is: *[1 mark]*

A) 10000

B) 10004

C) 9996

D) 9998

Q3. Which of these is the correct expansion of $(a + 2)(b + 4)$? *[1 mark]*

A) $ab + 2a + 4b + 8$

B) $ab + 4a + 2b + 8$

C) $ab + 6$

D) $ab + 8$

Q4. In any 2×2 block of a calendar, the two diagonal products always differ by: *[1 mark]*

A) 8

B) 7

C) It depends on the block

D) 1

Q5. Which pair has the larger product: 14×26 or 16×24? *[1 mark]*

A) They are equal

B) 14×26

C) 16×24

D) Cannot be decided without computing

Q6. Use a suitable identity to find 91^2. *[2 marks]*

Q7. The expression (a b)(a^2 + ab + b^2) simplifies to: *[1 mark]*

A) a^3 3ab + b^3

B) a^2 b^2

C) a^3 b^3

D) a^3 + b^3

Q8. Three consecutive numbers are taken. The middle one is squared and the product of the other two is subtracted from it. What is the result? *[3 marks]*