

## A P.I. R<sup>2</sup> Mini-Mystery

### Who Killed Mr. Pemdás?

**Directions:** Solve each problem below using the correct order of operations, then use your solutions to eliminate the suspects and solve the mystery.

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| <p>1. <math>6^2 - 12</math></p> <p>3. <math>5^2 - (3 + 4)</math></p> <p>5. <math>4(3 + 4) - 3 \cdot 5</math></p> <p>7. <math>6^2 - 4 \cdot 3 + 7</math></p> <p>9. <math>2[13 - (48 \div 4)]</math></p> <p>11. <math>\frac{5^2 \cdot 2 - 8 \cdot 2^2}{2}</math></p> | <p>2. <math>(10 + 2) \cdot 3 - 1</math></p> <p>4. <math>4 + 6 \div 2</math></p> <p>6. <math>33 \div 11 \cdot 12 - 3^2</math></p> <p>8. <math>8^2 - 7^2 + (14 - 9)</math></p> <p>10. <math>154 \div (5 + 3^2)</math></p> <p>12. <math>\frac{(2 \cdot 5)^2 + 4}{3^2 - 5}</math></p> |
|--|---|

**Evaluate each expression if  $a = 12$ ,  $b = 6$  and  $c = 3$**

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|---|--|
| <p>13. <math>b^2 + a - c^2</math></p> <p>15. <math>bc^2 - \frac{2a}{b}</math></p> <p>17. <math>c(a + b) - bc</math></p> <p>19. <math>\frac{a(b^2 - bc)}{c^2} + b</math></p> | <p>14. <math>\frac{a + b^2}{c}</math></p> <p>16. <math>\frac{a^2 - bc}{b}</math></p> <p>18. <math>b^2 - c^2 + (a + b + c)</math></p> <p>20. <math>4c^2 + (a \div b)</math></p> |
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<b>WHO?</b>	
Mr. Duffy	11
Mr. Frazier	21
Mr. Dono	30
Ms. Palazzolo	18
Mrs. Dundas	32
Ms. Toolan	7
<b>WHAT?</b>	
Music Stand	35
Dementor's Kiss	10
Math Book	16
Tie	39
Dictionary	9
Social Studies Book	48
<b>WHERE?</b>	
Chorus Room	27
Gym	50
Main Office	42
Room 204	20
Library	36
Chorus Room	2
Nurse's Office	26
Band Room	13
Hall	31
Courtyard	24
Cafeteria	38

IT WAS (WHO)	WITH A (WHAT)	IN THE (WHERE)
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