

**EVALUACIÓN DE COMPETENCIA CURRICULAR
EDUCACIÓN SECUNDARIA
MATEMÁTICAS
-Guía para la corrección-**

Curso Segundo de Educación Secundaria

1. $(a/b)^4 = a^4 / b^4$

2. 10^4

3. $(-2)^6 = 36$

4. $\sqrt{5} \cdot \sqrt{10} \cdot \sqrt{2} = \sqrt{100} = 10$

$5^5 / 5^5 =$

5. $3/3$

6. $5/7$

7.
$$\frac{5(3 - 2)}{(3 - 2) \cdot (3 - 2)} = \frac{5 \cdot 3 - 5 \cdot 2}{5 - 2 \cdot 6}$$

8. $5(-3) + 3 = -15 + 3 = -12$

9. $5x - 1 = 2x - 4 + 30$ $5x - 2x = -4 + 30 + 1$
 $3x = 27$ $x = 9$

10.
$$\begin{array}{r} x + y = 9 \\ 2x - y = 6 \\ \hline 3x = 15 \end{array}$$
 $x = 5$ $y = 9 - 5 = 4$

11. $-x + y = 2$
 $-2x + y = 1$

X	Y
-2	0
0	2
2	4

X	Y
-2	-3
0	1
2	5

$x = 1$
 $y = 3$

12. $4/x = 2/6 \quad 2x = 24 \quad \boxed{X = 12}$

13. $\boxed{X \cdot (5X + 9)}$

14.
$$\begin{array}{r} p(x) = 7x^5 - 3x + 4 \\ q(x) = -5x; \quad + 5x - 2 \\ \hline \boxed{-5x; + 7x^5 + 2x + 2} \end{array}$$

15.

$p(x) = 4x^5 - x + 2$
 $q(x) = 5x - 5 \quad \boxed{20x; -25x^5 + 15x - 10}$

16.

$(6x; + 5x^5 + x) : (2x + 1)$

$$\begin{array}{r} 6x; + 5x^5 + x : 2x + 1 \\ -6x; - 3x^5 \quad \quad 3x^5 + x \\ \hline + 2x^5 + x \\ - 2x^5 - x \\ \hline 0 \end{array}$$

17. $(a + b) \cdot (a - b) = \boxed{a^2 - b^2}$

18. $(a + b)^2 = \boxed{a^2 + b^2 + 2ab}$

19. $x^2 - 5x + 6 = 0$

$$X = \frac{5 + \sqrt{25 - 24}}{2} = \frac{5 + 1}{2} = \boxed{2 = X}$$

20. $3x; -3 =$
 $3x; -3 = 0 \quad x; = 3/3 = 1 \quad \boxed{X = 1}$

21. $\boxed{\text{Cada 60 días}}$

22. $8 - 2x = -16 \quad -2x = -16 - 8 \quad x = 24/2 \quad \boxed{X = 12}$

23.
$$\begin{array}{r} x + y = 95 \\ x - y = 125 \\ \hline 2x = 220 \end{array} \quad \begin{array}{l} x = 220/2 = 110 \quad \boxed{X = 110} \\ 110 + y = 95 \quad y = 95 - 110 = -15 \quad \boxed{Y = -15} \end{array}$$

24.
$$\begin{array}{r} 100 \text{ ----- } 5000 \\ 70 \text{ ----- } X \end{array} \quad X = 350000/100 = 3500 \quad Y = 300000/100 = 1500$$

$X = 3500 \quad Y = 1500$

25.

$10x = 62 + x^2 \quad 100 - 36 = x^2 \quad x = 8$

$S = b \times h \quad S = 8 \times 6 = 48 \text{ cm}^2$

26. $V = l \times a \times h = 4 \times 5 \times 3 = 60 \text{ m}$

27. $V = \pi \cdot r^2 \cdot h = 3,14 \cdot 4 \cdot 12 = 602,88 \text{ cm}$

28. $V = 1/3 \cdot S_b \cdot h = 1/3 \cdot 64 \cdot 12 = 256 \text{ cm}$

29.

$\bar{X} = 3 + 9,5 + 8 + 7,5 / 4 = 7$

30. $\bar{X} = 13 + 3 + 9 + 14 + 5 / 5 = 8,8 \text{ Kg}$