



## EXAMEN

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Instrucciones: Resuelve de forma clara, correcta y limpia las siguientes operaciones. (11)

1.  $(3A^3 + 5A^2 - 4) : (3A)$

$$\frac{3a^3 = 10^4}{3a} \quad \frac{1}{50} - \frac{30}{1} = \frac{1}{15} a^3$$

$$10^4 + \frac{1}{15} a^3 + \frac{1}{12} a$$

2.  $(\frac{2}{3} A^2 B^2 - \frac{1}{4} A^2 B^4 + \frac{5}{6} A B^4 - \frac{2}{3} B^5) : (-\frac{1}{2} A B^2)$

$$\left. \begin{array}{l} \frac{2}{3} a^2 b^2 \\ -\frac{1}{4} a^2 b^4 \\ \frac{5}{6} a b^4 \\ -\frac{2}{3} b^5 \end{array} \right) \left( -\frac{1}{2} \right) = \frac{2}{4} a^2 b^6 \quad \frac{5}{6} \left) = \frac{10}{6} a^2 b^6$$

$$\frac{1}{2} a b^2$$

$$\frac{4}{3} a^2 b^4 + \frac{2}{4} a^2 b^6 + \frac{10}{6} a^2 b^6 + \frac{2}{3} a b^6$$

$$\left. \begin{array}{l} \frac{2}{5} \\ \frac{1}{2} \end{array} \right) = \frac{2}{3} a b^6$$

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3.  $(x^4 - 2x^3 - 11x^2 + 30x - 20) : (x^2 + 3x - 2)$

$$\begin{array}{r}
 x^2 + 3x - 2 \overline{) x^4 - 2x^3 + 11x^2 + 30x - 20} \\
 \underline{x^4 + 3x^3 - 2x^2} \phantom{+ 30x - 20} \\
 -16x^3 + 30x^2 + 30x \phantom{- 20} \\
 \underline{-16x^3 + 48x^2 - 32x} \phantom{- 20} \\
 +16x^2 - 48x - 32 \\
 \underline{+16x^2 - 48x - 32} \\
 +180x - 52
 \end{array}$$

(AE):  $(p - SA \pm EA \pm)$   
 $x^2 + 3x - 2$

4.  $(x^6 + 5x^4 + 3x^2 - 2x) : (x^2 - x + 3)$

$$\begin{array}{r}
 x^2 - x + 3 \overline{) x^6 + 5x^4 + 3x^2 - 2x} \\
 \underline{-x^5 + x^4 - 3x^3} \phantom{- 2x} \\
 3x^5 - 3x^4 + 3x^3 \phantom{- 2x} \\
 \underline{-3x^5 + 3x^4 - 9x^3} \phantom{- 2x} \\
 12x^3 - 2x
 \end{array}$$

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5.  $(2x^4 - 2x^3 + 3x^2 + 5x + 10) : (x + 2)$ .

$$\begin{array}{r} 2x^2 - 2x + 3 \\ x+2 \overline{) 2x^4 - 2x^3 + 3x^2 + 5x + 10} \\ \underline{2x^4 - 2x^3 + 3x^2 + 5x + 10} \end{array}$$