

1) Find m if we know the remainder = -5 in the following division: $(-2x^3 + 6x^2 - mx - 6) : (x + 1)$

2) Calculate and simplify:

a) $\frac{(x-2)^2}{4x^2-16} \div \frac{21x}{3x+6}$

b) $\frac{x}{x^2-36} - \frac{x-5}{3x+18}$

3) Solve :

a)	$x^4 - 4x^2 + 3 = 0$
b)	$\frac{5}{x+2} + \frac{x}{x+3} = \frac{3}{2}$
c)	$\sqrt{x+5} + \sqrt{2x+8} = 7$
d)	$2x^3 - 4x - 7x = -x^2 + x + 3$

4) Solve : $\log_2(8x) - \log_2(x^2 - 1) = \log_2 3$

b) $4^{x+2} - 2 = 12$

5) Andre has more money than Bob. If Andre gave Bob \$20, they would have the same amount. While if Bob gave Andre \$22, Andre would then have twice as much as Bob. How much does each one actually have?

6) Solve $\left. \begin{array}{l} x + y = -3 \\ x^2 + y^2 = 17 \end{array} \right\}$

7) The area of a rectangular garden is 900 m² and it is surrounded by a walkside which is 5 m wide and its area is 850 m². Calculate the dimensions of the garden.

1	2	3	4	5	6	7
0,8	1	a)0,75 b)0,7 5 c)1 d)0,5	1, 5	1	1,2	1,5