Synthetic Division
Act. # 35

FIND the value of K in each polynomial given the REMAINDER.

1) $(x^3 - 2x^2 + 13x + K) \div (x+1)$ Remainder is -8.

2) $(n^3 + 7n^2 + Kn + 3) \div (n+2)$ Remainder is -5.

3) $(p^3 - 10p^2 + 20p + K) \div (p-5)$ Remainder is 1.

4) $(x^3 - 13x^2 + Kx + 18) \div (x-7)$ Remainder is 4.

5) $(a^3 - 2a^2 - 14a + K) \div (a+3)$ Remainder is -8.

6) $\dfrac{2x^3 + Kx - 7}{x-2}$ Remainder is -1.

7) $\dfrac{5x^3 - 3x^2 + K}{x-1}$ Remainder is -4.

8) $\dfrac{x^3 + K}{x+2}$ Remainder is -3.