The Remainder Theorem

1) Find the remainder when $x^3 - 2x^2 - x - 2$ is divided by $x + 1$.

2) If $f(x) = x^3 + 3x - 4$. Find the remainder when $f(x)$ is divided by $x - 4$.

3) Find the remainder when $x^3 + 3x - 4$ is divided by $x + 1$.

4) Given that $f(x) = 6x^3 - 3x^2 - 17x + 7$, divide $f(x)$ by $2x + 3$.

5) Find the remainder when $6x^3 + 27x^2 - 14x + 15$ is divided by $x + 5$.

6) When divided by $(x + 1)$ and $(x + 2)$, the expression

$$ax^2 + bx + 3$$

leaves remainders 6 and 9 respectively. Find the values for a and b

7) Find the remainder when $x^3 + 3x^2 - 5x - 6$ is divided by $x + 2$.

The Remainder Theorem

Answers

1) Find the remainder when $x^3 - 2x^2 - x - 2$ is divided by $x + 1$.

- 4

2) If $f(x) = x^3 + 3x - 4$. Find the remainder when $f(x)$ is divided by $x - 4$.

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3) Find the remainder when $x^3 + 3x - 4$ is divided by $x + 1$.

72

4) Given that $f(x) = 6x^3 - 3x^2 - 17x + 7$, divide $f(x)$ by $2x + 3$.

1

5) Find the remainder when $6x^3 + 27x^2 - 14x + 15$ is divided by $x + 5$.

10

6) When divided by $(x + 1)$ and $(x + 2)$, the expression

$$ax^2 + bx + 3$$

leaves remainders 6 and 9 respectively. Find the values for a and b

a=2, b= 1

7) Find the remainder when $x^3 + 3x^2 - 5x - 6$ is divided by $x + 2$.

8