Name : _____

Dividing Polynomials

Sheet 2

Divide by synthetic method.

1) $(z^3 - 13z - 12) \div (z + 1)$

2) $(10u^3 + 31u^2 - 26u - 9) \div (10u - 9)$

3) $(6n^4 + 5n^3 + 4n$ ... $\div (x + 7)$

5) $(15m^2 + 65m -$ ... $a^2 + 75a + 54) \div (a - 9)$

7) $(9b^4 + 15b - 24) \div (b - 1)$

8) $(-r^3 - 29r^2 - 112r - 48) \div (r + 4)$

Name : _____

Answer key

Dividing Polynomials

Sheet 2

Divide by synthetic method.

1) $(z^3 - 13z - 12) \div (z + 1)$

$z^2 - z - 12$

2) $(10u^3 + 31u^2 - 26u - 9) \div (10u - 9)$

$u^2 + 4u + 1$

3) $(6n^4 + 5n^3 + 4n$ ... $\div (x + 7)$

$n^3 + 2n^2 + 3n +$

5) $(15m^2 + 65m -$ ... $a^2 + 75a + 54) \div (a - 9)$

15m – 10 ... **6**

7) $(9b^4 + 15b - 24) \div (b - 1)$

$9b^3 + 9b^2 + 9b + 24$

8) $(-r^3 - 29r^2 - 112r - 48) \div (r + 4)$

$-r^2 - 25r - 12$