

Honors Math 3

Long Division

Use long division.

1. $(3x^2 - 16x + 21) \div (x - 3)$

2. $(x^3 - 3x^2 + 3x - 9) \div (x - 3)$

3. $(x^3 - 4x^2 + 6x - 4) \div (x + 2)$

4. $(5x^3 - 11x^2 - 14x - 10) \div (x - 3)$

5. $(2x^3 - 8x) \div (x + 1)$

6. $(3x^3 - 17x^2 + 13x + 4) \div (3x - 2)$

7. $(10c^3 + c^2 - 7c + 2) \div (5c - 2)$

8. $(2x^3 + 5x^2 - 4x - 5) \div (x + \frac{1}{2})$

9. $(4x^2 - 3x - 1) \div (x + \frac{1}{4})$

10. $(2a^3 - 7a^2 - 5a + 17) \div (2a + 3)$

11. $(4x^3 - 10x^2 + 19) \div (x - 2)$

12. $(5x^4 - 2x^3 + 4x^2 - 3x + 6) \div (x - 1)$

13. $(3x^4 + 7x^3 - 7x + 2) \div (3x - 2)$

14. $(x^3 + 3cx^2 + 6c^2x + 42c^3) \div (x + c)$

15. $(x^5 - 32) \div (x - 2)$

16. $(x^4 - 12x^2 + 27) \div (x + \sqrt{3})$

1.

Answer: $3x - 7$
 CodePath: EAS.TRI.G.A.11

2.

Answer: $x^2 + 3$
 CodePath: EAS.TRI.G.A.31

3.

Answer: $x^2 - 6x + 18, R = -40$
 CodePath: EAS.TRI.G.A.35

4.

Answer: $5x^2 + 4x - 2, R = -16$
 CodePath: EAS.TRI.G.A.52

5.

Answer: $2x^2 - 2x - 6, R = 6$
 CodePath: EAS.TRI.G.A.54

6.

Answer: $x^2 - 5x + 1, R = 6$
 CodePath: EAS.TRI.G.A.69

7.

Answer: $2c^2 + c - 1$
 CodePath: EAS.TRI.G.A.75

8.

Answer: $2x^2 + 4x - 6, R = -2$
 CodePath: EAS.TRI.G.A.83

9.

Answer: $4x - 4$
 CodePath: EAS.TRI.G.A.22

10.

Answer: $a^2 - 5a + 5, R = 2$
 CodePath: EAS.TRI.G.A.71

11.

Answer: $4x^2 - 2x - 4, R = 11$
 CodePath: EAS.TRI.G.A.80

12.

Answer: $5x^3 + 3x^2 + 7x + 4, R = 10$
 CodePath: EAS.TRI.G.A.94

13.

Answer: $x^3 + 3x^2 + 2x - 1$
 CodePath: EAS.TRI.G.A.106

14.

Answer: $x^2 + 2cx + 4c^2, R = 38c^3$
 CodePath: EAS.TRI.G.A.114

15.

Answer: $x^4 + 2x^3 + 4x^2 + 8x + 16$
 CodePath: EAS.TRI.G.A.118

16.

Answer: $x^3 - \sqrt{3}x^2 - 9x + 9\sqrt{3}$
 CodePath: EAS.TRI.G.A.177