

Example: Use long exposure to find the stars



Example 2: $n(x) = x^3 - 3x^2 - x + 3$.

The possible rational zeros are

$$\pm \frac{p}{q} = \pm \frac{\text{factors of } 3}{\text{factors of } 1}$$

$$= \pm \frac{1, 3}{1} = \pm 1, \pm 3$$

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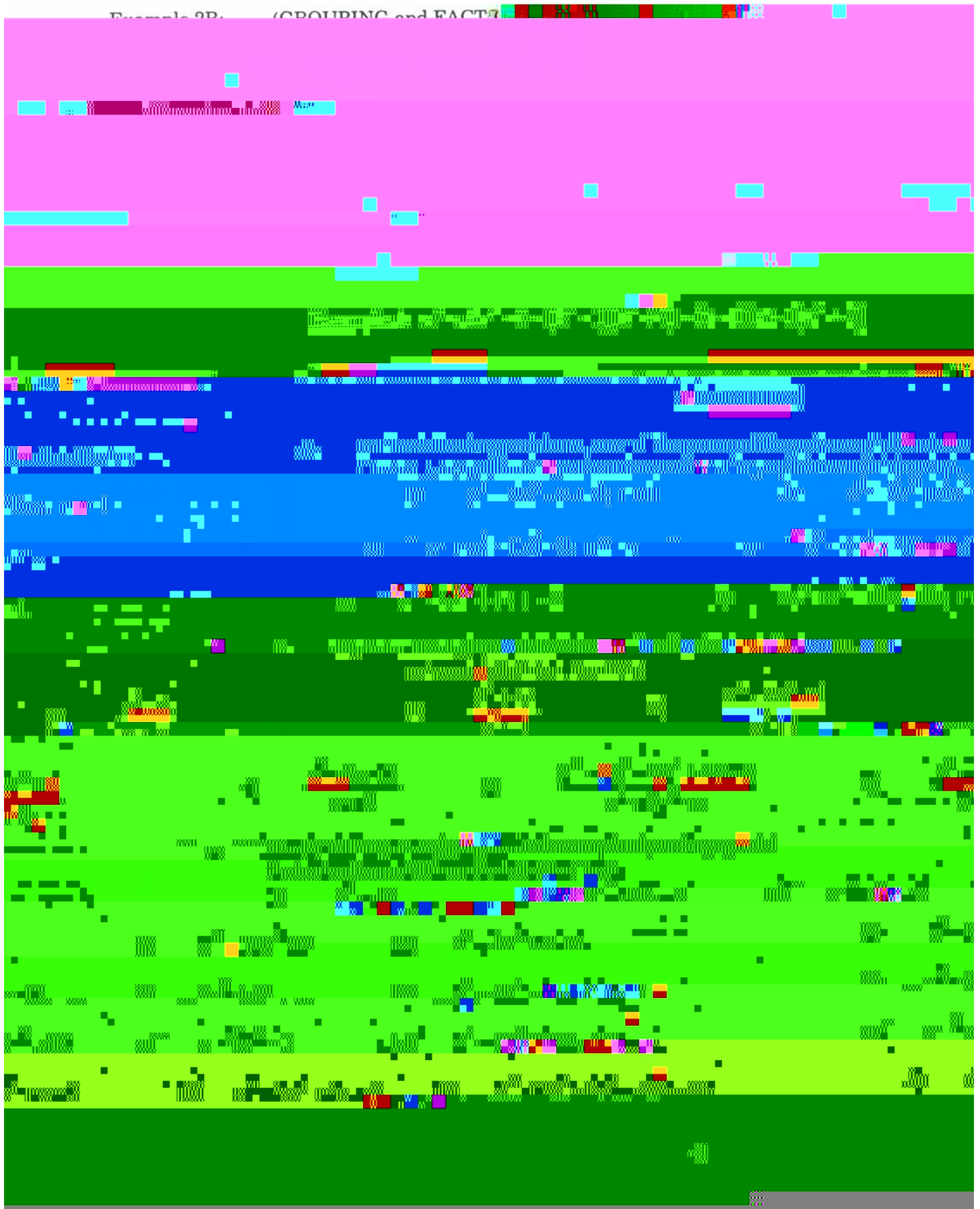
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Figure 18. (GROUPING and FACTS)



ANSWERS

1) $(x-1)(x+1)(x+4)(x+7)$

4) $x(x+1)(x-2)(x-8)$

A.

2) $(x-2)^2(x-1)$

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

3) $(x-2)^2(x+1)(x+7)$

6) $(x+1)(2x-5)(x+2)$

1) $1 + \frac{4x+1}{x^2-x+1}$

4) $x^2 - 2x + 7 - \frac{9}{x+2}$

B.