1. Find all the values of u such that $\frac{u^3-15u^2+71u-105}{u^2-7u+10}=0$.

- ● **$u=3, 7$**
- ○ $u=5, 7$
- ○ $u=2, 3, 5, 7$
- ○ $u=4, 5, 7$

2. What are all the values of x such that $\frac{x^3-9x^2+24x-16}{x^2-4x+4}=0$?

- ● **$x=1, 4$**
- ○ $x=1, 4, 5$
- ○ $x=1, 2, 4$ (repeated)
- ○ $x=2$ (repeated)

3. Compute all the solutions to the equation $\frac{m^3-2m^2+m}{m^2-8m+15}=0$.

- ○ $m=0, 1, 2$
- ○ $m=3, 5$
- ● **$m=0, 1$**
- ○ $m=0, 1$

4. Find all the values of x such that $\frac{x^3-3x^2+2x}{x^2-7x+12}=0$.

- ● **$x=0, 1, 2$**
- ○ $x=0, 1, 2, 3$
- ○ $x=1$ (repeated), 2
- ○ $x=1, 2$

5. Compute all the solutions to the equation $\frac{w^3-9w^2+20w-12}{w^2-4w+4}=0$.

- ● **$w=1, 6$**
- ○ $w=2$ (repeated)
- ○ $w=2$ (repeated), 6
- ○ $w=2, 6$

6. Compute all the solutions to the equation $\frac{x^3-11x^2+36x-36}{x^2-3x+2}=0$.

- ○ $x=2, 4, 6$
- ● **$x=3, 6$**
- ○ $x=2, 6$
- ○ $x=2$ (repeated), $3, 6$

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7. Find all the solutions to the equation $\frac{x^3-4x^2+3x}{x^2-12x+35}=0$.

- ○ $x=0, 3$
- ● **$x=0, 1, 3$**
- ○ $x=0, 3, 7$
- ○ $x=0, 2, 3$

8. Compute all the solutions to the equation $\frac{x^3-8x^2+20x-16}{x^2-10x+24}=0$.

- ● **$x=2$**
- ○ $x=2, 3, 4$
- ○ $x=2$ (repeated), $4, 6$
- ○ $x=2, 4$

9. Calculate all values of v such that $\frac{v^3-13v^2+54v-72}{v^2-11v+28}=0$.

- ○ $v=4$ (repeated), 6
- ○ $v=3, 4$ (repeated), 6
- ● **$v=3, 6$**
- ○ $v=4, 6$

10. Find all the values of x such that $\frac{x^3-10x^2+21x}{x^2-7x+10}=0$.

- ○ $x=0, 3, 5, 7$
- ● **$x=0, 3, 7$**
- ○ $x=0, 3$
- ○ $x=0, 3, 8$

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11. Find all the solutions to the equation

$\frac{x^3-10x^2+25x}{x^2-3x+2}=0$.

- ○ $x=0, 5$
- ○ $x=0, 5, 6$
- ● **$x=0, 5$**
- ○ $x=0, 1, 5$ (repeated)

12. Find all the values of x such that

$\frac{x^3-13x^2+56x-80}{x^2-5x}=0$.

- ○ $x=4, 5$
- ○ $x=4$ (repeated), 5 (repeated)
- ○ $x=4, 5$ (repeated)
- ● **$x=4$**

13. Find all the solutions to the equation

$\frac{u^3-10u^2+28u-24}{u^2-8u+15}=0$.

- ○ $u=2$ (repeated)
- ○ $u=2$ (repeated), $5, 6$
- ● **$u=2, 6$**
- ○ $u=2$ (repeated), 7

14. Calculate all values of u such that

$\frac{u^3-10u^2+25u}{u^2-8u+12}=0$.

- ○ $u=5$ (repeated)
- ● **$u=0, 5$**
- ○ $u=0, 2, 5$ (repeated)
- ○ $u=1, 5$ (repeated)

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15. Find all the values of x such that $\frac{x^3-14x^2+61x-84}{x^2-9x+14}=0$.

- ○ $x=3, 7$
- ● **$x=3, 4$**
- ○ $x=2, 3, 7$
- ○ $x=3, 5, 7$

16. Compute all the solutions to the equation $\frac{m^3-12m^2+47m-60}{m^2-5m}=0$.

- ● **$m=3, 4$**
- ○ $m=4, 5$
- ○ $m=0, 4, 5$
- ○ $m=4$ (repeated), 5

17. Compute all the solutions to the equation $\frac{z^3-6z^2+8z}{z^2-6z+9}=0$.

- ○ $z=0, 2$
- ● **$z=0, 2, 4$**
- ○ $z=0, 2, 5$
- ○ $z=3$ (repeated)

18. What are all the values of x such that $\frac{x^3-14x^2+60x-72}{x^2-8x+16}=0$?

- ● **$x=2, 6$**
- ○ $x=4$ (repeated)
- ○ $x=2, 6, 7$
- ○ $x=2, 6$

19. Solve the equation $\frac{a^3-6a^2+8a}{a^2-a}=0$ for a.

- ● **$a=2, 4$**
- ○ $a=0, 1$
- ○ $a=1, 2, 4$
- ○ $a=0, 2, 4$

20. Calculate all values of v such that $\frac{v^3-14v^2+61v-84}{v^2-6v}=0$.

- ○ $v=0, 3, 4, 7$
- ○ $v=4$ (repeated), 7
- ○ $v=4, 7$
- ● **$v=3, 4, 7$**