$\qquad$ Date Pd

## $\square$ Use when you get it right all by yourself

$\boldsymbol{S}$ Use when you did it all by yourself, but made a silly mistake H Use when you could do it alone with a little help from teacher or peer $\boldsymbol{G}$ Use when you completed the problem in a group
$\boldsymbol{X}$ Use when a question was attempted but wrong (get help)
$N$ Use when a question was not even attempted

| CONCEPTS | BASIC | INTERMEDIATE | ADVANCED |
| :--- | :---: | :---: | :---: |
| Determining an LCD |  |  | 12,13 |
| Restricting the domain in interval notation |  |  | 12,13 |
| Solving rational equations |  |  | 12,13 |
| Checking solutions |  |  | 12,13 |
| Solving literal equations | 1 | 3,5 | $2,4,6$ |
| Writing phrases as expressions | 7 | 8 |  |
| Setting up \& solving proportions |  | 9 |  |
| Identifying $x-\& y$-intercepts | 10 | 11 |  |

Solve each equation for the indicated variable.

1. $R=\frac{E}{I}$ for I (Electronics: resistance of a circuit)
2. $\quad T=\frac{2 U}{B+E}$ for B (Merchandising: stock turnover rate)
3. $B=\frac{705 w}{h^{2}}$ for w (Health: body-mass index)
4. $\quad N=R+\frac{V}{G}$ for G (Urban forestry: tree plantings per year)
5. $\frac{C}{\pi r}=2$ for $r$ (Geometry: circumference of a circle)
6. $\frac{1}{y}+\frac{1}{3}=\frac{1}{x}$ for x

Write each phrase as an expression.
7. The reciprocal of $x$
8. The reciprocal of $x$, added to the reciprocal of 2 .

## Answer each question.

9. If a tank is filled in 3 hours, what fractional part of the tank is filled in 1 hour?

Identify the $x$ - and $y$-intercepts in coordinate form.
10.

11.


State the LCD. Restrict the domain. Then solve each equation. Check your solution(s).
12. $0=\frac{5}{x^{2}+4 x+3}+\frac{2}{x^{2}+x-6}-\frac{3}{x^{2}-x-2}$
13. $\frac{-2}{x^{2}+2 x-8}+\frac{1}{x^{2}+9 x+20}=\frac{-4}{x^{2}+3 x-10}$

## Rate your mastery level!

How confident are you with the skills this CYU covered? Circle the score you would give yourself.


Basic
Intermediate
Advanced Solved ALL!

