

7.3 Creating Equivalent Rational Expressions DAY THREE CYU

Use when you get it right all by yourself
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
G Use when you completed the problem in a group
X Use when a question was attempted but wrong (get help)
N Use when a question was not even attempted

CONCEPTS	BASIC	INTERMEDIATE	ADVANCED
Finding an LCD	1 - 4	5 - 8	9 - 12
Multiplying polynomials	1 - 4	5 - 8	9 - 12
Domain restriction	1 - 4	5 - 8	9 - 12

Rewrite each rational expression as an equivalent rational expression with the given denominator. Write your final answer to replace the ? in standard form. Then state what your variable cannot equal, domain restriction.

1. $\frac{3}{2x} = \frac{?}{4x^2}$

$6x$
 $x \neq 0$

2. $\frac{3}{9y^5} = \frac{?}{72y^9}$

$24y^4$
 $y \neq 0$

3. $\frac{6}{3a} = \frac{?}{12ab^2}$

$24b^2$
 $a \neq 0$
 $b \neq 0$

4. $\frac{5}{4y^2x} = \frac{?}{32y^3x^2}$

$40xy$
 $x \neq 0$
 $y \neq 0$

5. $\frac{9}{2x+6} = \frac{?}{2y(x+3)}$

$9y$
 $x \neq -3$
 $y \neq 0$

6. $\frac{4x+1}{3x+6} = \frac{?}{3y(x+2)}$

$4xy + y$
 $x \neq -2$
 $y \neq 0$

$$7. \frac{9a+2}{5a+10} = \frac{?}{5b(a+2)}$$

$$9ab+2b$$

$$a \neq -2$$

$$b \neq 0$$

$$8. \frac{5+y}{2x^2+10} = \frac{?}{4(x^2+5)}$$

$$2y+10$$

$$x \neq -5i$$

$$9. \frac{x}{x^3+6x^2+8x} = \frac{?}{x(x+4)(x+2)(x+1)}$$

$$x^2+x$$

$$x \neq 0, -4, -2, -1$$

$$10. \frac{5x}{x^3+2x^2-3x} = \frac{?}{x(x-1)(x-5)(x+3)}$$

$$5x^2 - 25x$$

$$x \neq 0, 1, 5, -3$$

$$11. \frac{9y-1}{15x^2-30} = \frac{?}{30x^2-60}$$

$$18y-2$$

$$x \neq \sqrt{2}$$

$$12. \frac{6m-5}{3x^2-9} = \frac{?}{12x^2-36}$$

$$24m-20$$

$$x \neq \sqrt{3}$$

CYU Reflection: How far can you go: basic, intermediate, or advanced?

Rate your mastery level!

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

