

# SOLVING RATIONAL EQUATIONS WORKSHEET

Solve each equation and check (state excluded values).

1.  $\frac{2a-3}{6} = \frac{2a}{3} + \frac{1}{2}$

$a = -3$

6.  $\frac{4x}{3x-2} + \frac{2x}{3x+2} = 2$

$x = -2$

EV:  $x \neq 2, \frac{2}{3}$

2.  $\frac{2b-3}{7} - \frac{b}{2} = \frac{b+3}{14}$

$b = -9/4$

7.  $\frac{5}{5-p} - \frac{p^2}{5-p} = -2$

$p = -5, 3$

EV:  $p \neq 5$

3.  $\frac{3}{5x} + \frac{7}{2x} = 1$

$x = \frac{41}{10}$  EV:  $x \neq 0$

8.  $\frac{2a-3}{a-3} - 2 = \frac{12}{a+3}$

$a = 5$

EV:  $a \neq 3, -3$

4.  $\frac{5k}{k+2} + \frac{2}{k} = 5$

EV:  $k \neq 0, -2$

$k = \frac{1}{2}$

9.  $\frac{2b-5}{b-2} - 2 = \frac{3}{b+2}$

$b = 1$

EV:  $b \neq 2, -2$

5.  $\frac{m}{m+1} + \frac{5}{m-1} = 1$

EV:  $m \neq 1, -1$

$m = -\frac{3}{2}$

10.  $\frac{4}{k^2-8k+12} = \frac{k}{k-2} + \frac{1}{k-6}$

EV:  $k \neq 0, 2$

$k = \cancel{0}, -1$

