

## Answers to Practice Questions for MTE 7 – Rational Expressions and Equations

1.  $x = \frac{7}{4}$

2.  $v = 3, 4$

3.  $\frac{b^2}{a^4 c^2}$

4.  $\frac{1}{2}$

5.  $\frac{5}{4}$

6.  $\frac{1}{w+1}$

7.  $(x-2)(x+2)$

8.  $\frac{-2x+20}{(x-2)(x+2)}$

9.  $\frac{9y+14}{63y^2}$

10.  $\frac{3m^2+24m+34}{(m+6)(m+1)(m+4)}$

11.  $\frac{(x-1)(x-4)}{4x(x+4)}$

12.  $\frac{-9p-44}{(5p-4)(p+4)}$

13.  $\frac{12w-17}{w(6w-7)}$

14.  $\frac{w-3}{w-4}$

15.  $6j^3 + 15j + 9$

16.  $5p^2 - 2p + 9 + \frac{5}{4p+5}$

17.  $x = -6, 4$

18.  $\frac{7}{x+6} = \frac{3}{x-6}$

19. 75 mph

20. 792

21.  $1\frac{3}{7}$  hours