

**MAT 055 Practice Test Answer Key**  
**Chapters 14 Test**

1.  $-\frac{7}{3}$

2. Undefined

3.  $-4$

4. None

5.  $-8, -9$

6.  $\frac{1}{5x+2}$

7.  $\frac{y+4}{y+7}$

8.  $\frac{a-7}{a+3}$

9.  $-1$

10.  $-m-s$

11.  $\frac{28p}{9}$

12.  $\frac{k}{k+6}$

13.  $\frac{(z-3)(z-8)}{z}$

14.  $\frac{y(y^2-3)}{(y-3)(y+2)}$

15.  $2$

16.  $\frac{8(x-1)}{x+4}$

17.  $\frac{55}{4x}$

18.  $\frac{2(3x+19)}{(x+5)^2}$

19.  $\frac{2(7x-10)}{105x^2}$

20.  $\frac{4(x-6)}{(x-3)(x-4)}$

21.  $\frac{x^6}{7y^3}$

22.  $\frac{x(x+3)}{72}$

23.  $\frac{k-2}{5}$

24.  $\frac{2y+3x}{3y-2x}$

25.  $\frac{x+8}{5x-17}$

26.  $x = \frac{7}{2}$

27.  $x = 0$

28.  $x = 1$

29.  $x = -8$

30.  $x = 5$

31. No Solutions

32.  $x = 3$

Solve.

- 33) Martha can rake the leaves in her yard in 4 hours. Her younger brother can do the job in 6 hours. How long will it take them to do the job if they work together?

Answer:  $\frac{12}{5}$  hr

- 34) An experienced accountant can balance the books twice as fast as a new accountant. Working together it takes the accountants 6 hours. How long would it take the experienced accountant working alone?

Answer: 9 hr

- 35) A boat goes 180 miles downstream in the same time it can go 150 miles upstream. The speed of the current is 8 miles per hour. Find the speed of the boat in still water.

Answer: 88 mph