

170 Worksheet Answers**PAGE ONE**

1-2 graphs on a real number line

3. $\{x: x \leq 5\}$

4. $\{x: x < 3\}$

5. x^{11}

6. g^{20}

7. $\frac{1}{16}$

8. $\frac{y^6}{x^3 z^{12}}$

9. 2

10. 4

11. 3

12. $\frac{3(x+3)}{x+4}$

13. $\frac{x^2 + 2x + 6}{(x-1)(x+2)}$

14. $\frac{-x+3}{(x+1)^2(x-1)}$

PAGE TWO

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

2. $-3 + 3\sqrt{2}$

3. $x = -3, -2$

4. $x = \pm\sqrt{7}$

5. $x = 4 \pm \sqrt{3}$

6. $\frac{5 \pm \sqrt{37}}{6}$

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

8. $x > -\frac{2}{3}$

9. $[2, 5)$

10. $[-1, 1) \cup [2, +\infty)$

PAGE THREE

1. $(-\infty, -2] \cup [\frac{2}{3}, \infty)$

2. $(-1, \frac{9}{5})$

3. $x = -\frac{7}{2}, \frac{1}{2}$

4. x int: $(\sqrt{2}, 0)$ $(-\sqrt{2}, 0)$
y int: $(0, -2)$

5. $(x+2)^2 + (y-5)^2 = 9$

6. Circle w/center $(0,0)$ and radius 5

7. Circle w/center $(2, -1)$ and radius 4

8. $m = \frac{3-1}{-5-(-2)} = -\frac{2}{3}$

9. $y = -x - 5$

PAGE FOUR

1. Horizontal line at $y = -4$

2. Vertical line at $x = 3$

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

4. $m_{QR} = -4$

$$m_{PR} = \frac{1}{4}$$

5. Width is 5 ft, length is 3 ft

6. You need 50 gallons of OJ

7. Slope represents an increase of 4.5 ft per year and the y-int represents the water level the year it was built.

8a. $p = \$1.75$

8b. $p = \$16.80$

9. 12 rides

10a. $k = 5.3, P = \frac{5.3}{V}$

10b. $P = 17.6 \text{ kPa}$