

You may not use a calculator on this worksheet. Reduce all answers to lowest terms.

Simplify.

1.  $-\frac{3}{4}d + \frac{1}{4}d$

2.  $w - \frac{5w}{6}$

3.  $\frac{2w}{3} + \frac{w}{6}$

4.  $\frac{2}{5}c + \frac{1}{10}c$

5.  $\frac{9}{5}h - \frac{7}{15}h$

6.  $-\frac{5x}{4} + 2x$

7.  $-\frac{7b}{10} - \left(-\frac{b}{2}\right)$

8.  $-\frac{11}{4}m + \frac{11}{5}m$

9.  $\frac{5}{9}p - \frac{5}{6}p + \frac{5}{18}p$

10.  $-\frac{11w}{4} - \frac{7w}{4} + \frac{9w}{2}$

11.  $\left(\frac{1}{2}m^2 + \frac{5}{3}m - \frac{1}{4}\right) + \left(\frac{1}{2}m^2 - \frac{1}{3}m + \frac{1}{2}\right)$

12.  $\left(\frac{2}{5}x - \frac{1}{2}xy + \frac{3}{2}y\right) + \left(\frac{1}{10}x + \frac{3}{2}xy - \frac{1}{2}y\right)$

13.  $\left(\frac{5}{6}r^2 + 3r - \frac{1}{3}\right) + \left(\frac{2}{3}r^2 - \frac{3}{2}r + \frac{1}{6}\right)$

14.  $\left(\frac{3}{4}w^2 + \frac{1}{4}w - \frac{1}{2}\right) + \left(\frac{1}{8}w^2 - \frac{3}{4}w - \frac{3}{2}\right)$

Evaluate for  $w = 6$ ,  $x = 3$ , and  $y = 10$ .

15.  $\frac{2y}{w} + \frac{y}{x} - 2x$

16.  $\frac{x+5}{xy}$

17.  $\frac{7w+2xy}{2y-x}$

18.  $\frac{(w+1)(x+2)}{w(y-3)}$

19.  $\frac{w-4}{w} + \frac{2y}{x}$

20.  $\frac{3w^2}{x^2y}$

21.  $\frac{3w^2}{x^2y}$