

Exercises ^[A-1]

[09-09-27-P1]

Simplify:

1. $\frac{z+2}{3} - \frac{z}{5}$
2. $\frac{3x+2}{8} - \frac{x}{8}$
3. $\frac{b-2}{4} - \frac{b}{12}$
4. $\frac{a+3b}{8} + \frac{a}{2}$
5. $\frac{7x+6}{14} - \frac{3}{7}$
6. $\frac{p+1}{2} + 1$
7. $\frac{x+y}{3} + \frac{y}{3} - x$
8. $\frac{z+4}{2} - \frac{z}{6} + \frac{1}{3}$
9. $\frac{x+6y}{16} + \frac{2x+y}{8} - \frac{y}{2}$

Simplify:

10. $\frac{4x-5}{2} - 2 + \frac{3x}{5}$
11. $\frac{2x+9}{14} - \frac{3x-4}{21}$
12. $\frac{3a+5}{10} - \frac{2a}{15} + \frac{1}{2}$
13. $\frac{x+3}{3} - \frac{x+2}{2}$
14. $\frac{2z+6}{5} - \frac{3z-1}{3}$
15. $\frac{5x+4}{4} - \frac{x+6}{6}$
16. $\frac{8x+y}{6} - \frac{2x-y}{2}$
17. $\frac{2a+4}{3} - a - 3$
18. $\frac{7a+12}{12} - \frac{6a-1}{24}$
19. $x - \frac{x-y}{3} + 2y$
20. $\frac{1}{12}(x-6) - \frac{1}{16}(2x+5) + 1$
21. $10\left(\frac{x-y}{2} - \frac{2x-3y}{5}\right)$
22. Multiply $\frac{x}{2} - \frac{x-2}{4} + \frac{2x}{5}$ by 20

Exercises ^[A-2]

Simplify:

1. $\frac{2p+5}{6} + \frac{4p}{3}$
2. $\frac{2x+2y}{3} - \frac{x}{2}$
3. $\frac{2x-1}{4} - \frac{x}{2}$
4. $\frac{3a+4}{6} + \frac{a}{4}$
5. $\frac{y+3}{6} + \frac{y}{3}$
6. $\frac{x+3}{3} - 2$
7. $\frac{a}{5} - \frac{5b}{6} + \frac{a+b}{3}$
8. $\frac{a}{3} + \frac{3a-5}{12}$
9. $\frac{4+3a}{6} - \frac{5a}{18} + \frac{3-a}{12}$
10. $\frac{x+y}{8} + \frac{3x-y}{12} - \frac{y}{6}$
11. $\frac{a+4}{4b} - \frac{a}{3b} + \frac{a-2}{12b}$
12. $\frac{x+3}{9} + \frac{x-4}{6} + \frac{x+5}{15}$
13. $\frac{5y+4}{4} - \frac{2y-1}{2}$
14. $\frac{2a+b}{14} - \frac{3a+b}{21}$
15. $\frac{p+5}{4} - \frac{p+5}{4}$
16. $\frac{a+2}{4} - \frac{a+3}{8}$
17. $2y+1 - \frac{4y+3}{12}$
18. $\frac{r}{4} + \frac{r-2}{8} - \frac{r-4}{16}$
19. $\frac{10a+4}{5} - \frac{6a+2}{3} - \frac{2}{15}$
20. $\frac{3}{4}(2y+7) - \frac{2}{5}(2y+5)$
21. Multiply $\frac{p}{4} - \frac{2p-1}{6}$ by 12.
22. Simplify $14\left(\frac{y-8z}{2} - \frac{2y+3z}{14} + \frac{y}{7}\right)$

Exercises ^[B]

Simplify:

$$1. \frac{2x-1}{10} + \frac{x+4}{4} - \frac{3x-2}{20}$$

$$4. \frac{y+6}{3} - \frac{y+10}{5} - \frac{2y}{15}$$

$$2. \frac{3(a+2b)}{8} - \frac{2a-b}{12}$$

$$5. \frac{x-3}{2x} + \frac{x+1}{3x} - \frac{2x-3}{6x}$$

$$3. \frac{1}{6}(x+3) - \frac{1}{12}(x-5) - \frac{x}{8}$$

$$6. 15\left(\frac{a-7}{5} - \frac{a}{3} + \frac{2a+1}{15}\right)$$

ANSWERS

Exercise [A-1]

$$1. \frac{2z+10}{15}$$

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

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

$$18. \frac{8a+25}{24}$$

$$1. 3$$

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

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

$$13. \frac{-x}{6}$$

$$19. \frac{2x+7y}{3}$$

$$2. 12$$

$$3. \frac{b-3}{6}$$

$$8. \frac{z+7}{3}$$

$$14. \frac{-9z+23}{15}$$

$$20. \frac{-2x+9}{48}$$

$$3. 0$$

$$4. \frac{5a+3b}{8}$$

$$9. \frac{5x}{16}$$

$$15. \frac{13x}{12}$$

$$21. x+y$$

$$4. -23\frac{1}{3}$$

$$5. \frac{x}{2}$$

$$10. \frac{26x-45}{10}$$

$$16. \frac{x+2y}{3}$$

$$22. 13x+10$$

$$5. 0$$

$$11. \frac{5}{6}$$

$$17. \frac{-a-5}{3}$$

Exercise [A-2]

$$1. \frac{10p+5}{6}$$

$$6. \frac{x-3}{3}$$

$$12. \frac{31x}{90}$$

$$18. \frac{5r}{16}$$

$$2. \frac{x+4y}{6}$$

$$7. \frac{16a-15b}{30}$$

$$13. \frac{y+6}{4}$$

$$19. 0$$

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

$$8. \frac{7a-5}{12}$$

$$14. \frac{b}{42}$$

$$20. \frac{14y+65}{20}$$

$$4. \frac{9a+8}{12}$$

$$9. \frac{33+5a}{36}$$

$$15. 0$$

$$21. -p+2$$

$$5. \frac{y+1}{2}$$

$$10. \frac{3x-y}{8}$$

$$16. \frac{a+1}{8}$$

$$22. 7y-59$$

$$11. \frac{5}{6b}$$

$$17. \frac{20y+9}{12}$$

Exercise [B]

$$1. \frac{3x+10}{10}$$

$$3. \frac{-x+22}{24}$$

$$5. \frac{3x-4}{6x}$$

$$2. \frac{5a+20b}{24}$$

$$4. 0$$

$$6. -20$$