
Basic Algebra
x + 3 = 7
2x − 5 = 9
x/2 + 3 = 5
(a+b)² = a² + 2ab + b²
x + y = 10
3(x − 2)
x/4 = 8

01 Whole-number addition and subtraction

සුළු කරන්න.

01. $242 + 121$

02. $223 - 127$

03. $39 + 82$

04. $121 - 2$

05. $23 + 73$

06. $101 - 79$

07. $115 + 6$

08. $163 - 154$

09. $148 + 96$

10. $215 - 11$

11. $192 + 9$

12. $104 - 88$

13. $109 + 169$

14. $99 - 56$

15. $195 + 49$

16. $133 - 121$

17. $163 + 16$

18. $143 - 120$

19. $104 + 12$

20. $153 - 89$

02 Signed integers: addition

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01. $24 + 14$

02. $-34 + 12$

03. $33 + (-20)$

04. $-3 + (-27)$

05. $21 + 22$

06. $-4 + 24$

07. $10 + (-10)$

08. $-21 + (-8)$

09. $18 + 96$

10. $-23 + 22$

11. $12 + (-21)$

12. $-31 + (-26)$

13. $29 + 19$

14. $-33 + 11$

15. $27 + (-5)$

16. $-35 + (-24)$

17. $12 + 15$

18. $-11 + 25$

19. $14 + (-17)$

20. $-30 + (-27)$

21. $7 + 28$

22. $-24 + 30$

23. $17 + (-10)$

24. $-31 + (-9)$

25. $18 + 25$

26. $-35 + 30$

27. $3 + (-6)$

28. $-22 + (-18)$

29. $28 + 9$

30. $-25 + 15$

03 Signed integers: subtraction

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01. $34 - 8$

02. $-25 - 10$

03. $34 - (-25)$

04. $-19 - (-8)$

05. $14 - 11$

06. $-30 - 13$

07. $9 - (-23)$

08. $-29 - (-31)$

09. $30 - 16$

10. $-27 - 12$

11. $36 - (-13)$

12. $-38 - (-4)$

13. $24 - 32$

14. $-31 - 14$

15. $26 - (-1)$

16. $-12 - (-6)$

17. $6 - 25$

18. $-12 - 2$

19. $10 - (-27)$

20. $-15 - (-3)$

21. $17 - 28$

22. $-12 - 2$

23. $11 - (-31)$

24. $-15 - (-3)$

25. $18 - 22$

26. $-26 - 30$

27. $9 - (-2)$

28. $-32 - (-4)$

29. $38 - 11$

30. $-35 - 27$

04 Positive and negative multiplication & division

සුළු කරන්න.

01. 4×9

02. $(-11) \times 11$

03. $(-10) \times (-6)$

04. $4 \times (-12)$

05. 12×6

06. $(-12) \times 4$

07. $(-11) \times (-9)$

08. $9 \times (-3)$

09. 11×10

10. $(-8) \times 8$

11. $(-9) \times (-7)$

12. $12 \times (-7)$

13. $23 \times (-3)$

14. $(-7) \times (-5)$

15. $\frac{54}{9}$

16. $\frac{(-18)}{6}$

17. $\frac{96}{-12}$

18. $\frac{-40}{-5}$

19. $\frac{40}{10}$

20. $\frac{-12}{6}$

21. $\frac{18}{-2}$

22. $\frac{-50}{-10}$

23. $\frac{45}{5}$

24. $\frac{-72}{9}$

25. $\frac{40}{-5}$

26. $\frac{(-50)}{(-5)}$

27. $\frac{56}{-7}$

28. $\frac{-63}{9}$

29. $\frac{-25}{-5}$

30. $\frac{-48}{8}$

05 Order of operations & brackets

සුළු කරන්න.

01. $6 + 2 \times 8$

02. $51 - 6 \times 8$

03. $(7 + 4) \times 5$

04. $\frac{36}{6} + 2$

05. $2 \times (3 - 5) + 5$

06. $11 - (4 + 8) \times 2$

07. $12 + 7 \times 3$

08. $15 - 4 \times 2$

09. $(12 + 8) \times 5$

10. $-\frac{90}{10} + 7$

11. $2 \times (8 - 4) + 4$

12. $2 - (12 + 2) \times 2$

13. $6 + 2 \times 6$

14. $43 - 9 \times 4$

15. $(15 + 9) \times (-2)$

16. $\frac{-42}{6} + 4$

17. $8 + 2(3 - 8)$

18. $2 - (5 + 8) \times 2$

19. $10 - 3(2 + 9)$

20. $34 - 11 \times 2$

21. $(9 + 9) \times 5$

22. $3 - \frac{120}{10}$

23. $6(8 - 9) + 9$

24. $10 - (8 + 7) \times 2$

25. $15 - 2 \times 3 - 2$

26. $15 - 2 \times (3 - 2)$

27. $(15 - 2) \times 3 - 2$

28. $\frac{(12+3)}{5} - (5 + 3)$

29. $3 \times 2 - 1 + 5$

30. $\frac{(4-11)}{7} + 1$

06 Multiplying by 10, 100, and 1000

අගය සොයන්න.

01. 2.340×100

02. 0.059×10

03. 1.2×100

04. 32×100

05. 68×10

06. 0.653×100

07. 3.75×1000

08. 27×10

09. 374×100

10. 7.9×100

11. 2.97×10

12. 38.7×100

13. 266×1000

14. 0.236×10

15. 4.17×100

16. 3.3142×1000

17. 256×10

18. 0.23×100

19. 0.87×1000

20. 71.4×10

21. 305×100

22. 902.2×100

23. 63.56×10

24. 33.6×100

25. 12.23×10

26. 1.205×10

27. 15.504×100

28. 234.13×10

29. 3.321×1000

30. 6.43×100

07 Multiplying by 20, 30, 200, 300 and more

අගය සොයන්න.

01. 75.1×200

02. 215×300

03. 106.5×20

04. 211×30

05. 182×40

06. 118.7×200

07. 186×300

08. 184×500

09. 21.9×20

10. 183×30

11. 205×40

12. 18.9×200

13. 197×300

14. 29×500

15. 149.8×20

16. 298×30

17. 94×40

18. 6.3×200

19. 179×300

20. 224×500

21. 20.7×20

22. 239×30

23. 233×40

24. 2.6×200

25. 12.3×50

26. 1.20×300

27. 15.5×300

28. 2.13×40

29. 3.31×2000

30. 6.3×600

08 Multiplication

අගය සොයන්න.

01. 115×25

02. 248×50

03. 270×75

04. 217×12

05. 137×16

06. 94×15

07. 172×25

08. 124×50

09. 141×75

10. 160×125

11. 86×16

12. 75×15

13. 110×25

14. 193×50

15. 107×75

16. 50×125

17. 190×40

18. 115×15

19. 64×25

20. 204×50

21. 76×75

22. 143×125

23. 87×16

24. 265×15

09 Dividing by 10, 100, and 1000

අගය සොයන්න.

01. $\frac{25}{100}$

02. $\frac{1.25}{100}$

03. $\frac{6.36}{10}$

04. $\frac{595}{100}$

05. $\frac{582}{1000}$

06. $\frac{692}{10}$

07. $\frac{165.43}{100}$

08. $\frac{1025}{1000}$

09. $\frac{370}{10}$

10. $\frac{1295}{100}$

11. $\frac{32.78}{1000}$

12. $\frac{205}{10}$

13. $\frac{823}{100}$

14. $\frac{225}{1000}$

15. $\frac{88.99}{10}$

16. $\frac{1103}{100}$

17. $\frac{607}{1000}$

18. $\frac{787}{10}$

19. $\frac{152.38}{100}$

20. $\frac{1056}{1000}$

21. $\frac{979}{10}$

22. $\frac{1213}{100}$

23. $\frac{60.99}{1000}$

24. $\frac{1426}{10}$

25. $\frac{32.05}{10}$

26. $\frac{0.125}{100}$

27. $\frac{50.05}{10}$

28. $\frac{4.56}{100}$

29. $\frac{173.2}{100}$

30. $\frac{38.32}{10}$

10 Dividing by 20, 30, 200, and more

අගය සොයන්න.

01. $\frac{286}{200}$

02. $\frac{1.26}{700}$

03. $\frac{6.36}{30}$

04. $\frac{595}{500}$

05. $\frac{582}{2000}$

06. $\frac{692}{40}$

07. $\frac{165.5}{500}$

08. $\frac{1023}{30}$

09. $\frac{490}{70}$

10. $\frac{1293}{300}$

11. $\frac{32.76}{3000}$

12. $\frac{204}{40}$

13. $\frac{822}{200}$

14. $\frac{225}{500}$

15. $\frac{88.2}{90}$

16. $\frac{1104}{600}$

17. $\frac{603}{3000}$

18. $\frac{707}{70}$

19. $\frac{152.36}{400}$

20. $\frac{1056}{200}$

21. $\frac{978}{30}$

22. $\frac{1203}{300}$

23. $\frac{60.96}{400}$

24. $\frac{1416}{30}$

25. $\frac{32.05}{20}$

26. $\frac{0.125}{200}$

27. $\frac{50.08}{80}$

28. $\frac{4.56}{300}$

29. $\frac{168.2}{800}$

30. $\frac{38.32}{20}$

11 Dividing by 25, 16, 8, and more

අගය සොයන්න.

01. $\frac{700}{25}$

02. $\frac{324}{16}$

03. $\frac{900}{25}$

04. $\frac{466}{16}$

05. $\frac{406}{8}$

06. $\frac{6500}{125}$

07. $\frac{740}{4}$

08. $\frac{672}{20}$

09. $\frac{275}{25}$

10. $\frac{585}{16}$

11. $\frac{99}{8}$

12. $\frac{3500}{125}$

13. $\frac{565}{4}$

14. $\frac{29}{20}$

15. $\frac{2975}{25}$

16. $\frac{130}{16}$

17. $\frac{244}{8}$

18. $\frac{8375}{125}$

19. $\frac{113}{4}$

20. $\frac{51}{20}$

21. $\frac{400}{25}$

22. $\frac{422}{16}$

23. $\frac{304}{8}$

24. $\frac{14625}{125}$

12 Decimal multiplication

අගය සොයන්න.

01. 3.16×34

02. 85.4×29

03. 1.5×16

04. 87.6×14

05. 9.19×4

06. 11.4×33

07. 4.41×4

08. 73×4.1

09. 5.93×9

10. 18.7×3

11. 4.58×16

12. 87×12

13. 8.38×23

14. 24.7×29

15. 7.48×22

16. 86.2×8

17. 1.26×20

18. 22.1×9

19. 9×2.1

20. 41×20

21. 6.19×31

22. 26.9×10

23. 9.87×2

24. 66.7×6

13 Decimal division

අගය සොයන්න.

01. $\frac{42.6}{2}$

02. $\frac{281}{4}$

03. $\frac{118.75}{5}$

04. $\frac{272}{8}$

05. $\frac{3420}{200}$

06. $\frac{1637.5}{25}$

07. $\frac{9.5}{2}$

08. $\frac{108.2}{4}$

09. $\frac{17.5}{5}$

10. $\frac{922}{8}$

11. $\frac{45}{20}$

12. $\frac{295}{25}$

13. $\frac{55}{2}$

14. $\frac{70}{4}$

15. $\frac{305}{5}$

16. $\frac{297.6}{8}$

17. $\frac{47.4}{20}$

18. $\frac{1187.5}{25}$

19. $\frac{11}{2}$

20. $\frac{180.08}{4}$

21. $\frac{950}{5}$

22. $\frac{536}{16}$

23. $\frac{264}{20}$

24. $\frac{455}{125}$

14 Simplifying numerical fractions

සුළු කරන්න.

01. $\frac{66}{110}$

02. $\frac{144}{152}$

03. $\frac{72}{252}$

04. $\frac{144}{168}$

05. $\frac{110}{198}$

06. $\frac{108}{126}$

07. $\frac{28}{119}$

08. $\frac{112}{176}$

09. $\frac{24}{184}$

10. $\frac{90}{108}$

11. $\frac{22}{30}$

12. $\frac{64}{88}$

13. $\frac{198}{231}$

14. $\frac{12}{48}$

15. $\frac{48}{100}$

16. $\frac{10}{38}$

17. $\frac{15}{30}$

18. $\frac{8}{14}$

19. $\frac{90}{210}$

20. $\frac{60}{72}$

21. $\frac{69}{522}$

22. $\frac{56}{96}$

23. $\frac{24}{32}$

24. $\frac{55}{121}$

15 Fraction addition and subtraction

සුළු කරන්න.

01. $\frac{9}{11}+\frac{8}{9}$

02. $\frac{6}{7}-\frac{3}{10}$

03. $\frac{2}{14}+\frac{9}{6}$

04. $\frac{3}{10}-\frac{2}{3}$

05. $\frac{9}{7}+\frac{6}{5}$

06. $\frac{4}{5}-\frac{1}{4}$

07. $\frac{11}{15}+\frac{3}{9}$

08. $\frac{6}{11}-\frac{7}{9}$

09. $\frac{9}{11}+\frac{7}{9}$

10. $\frac{11}{13}-\frac{4}{5}$

11. $\frac{9}{4}+\frac{3}{7}$

12. $\frac{7}{3}-\frac{11}{4}$

13. $\frac{1}{10}+\frac{7}{15}$

14. $\frac{10}{12}-\frac{1}{5}$

15. $\frac{6}{15}+\frac{10}{6}$

16. $\frac{4}{9}-\frac{2}{8}$

17. $\frac{11}{4}+\frac{8}{9}$

18. $\frac{7}{3}-\frac{3}{2}$

19. $\frac{4}{3}+\frac{1}{2}$

20. $\frac{10}{11}-\frac{5}{12}$

21. $\frac{4}{5}+\frac{7}{10}$

22. $\frac{4}{10}-\frac{2}{9}$

23. $\frac{8}{9}+\frac{3}{2}$

24. $\frac{4}{7}-\frac{1}{11}$

16 Fraction multiplication and division

සුළු කරන්න.

01. $\frac{9}{5} \times \frac{1}{2}$

02. $\frac{4}{6} \div \frac{8}{6}$

03. $\frac{5}{10} \times \frac{11}{15}$

04. $\frac{10}{9} \div \frac{10}{16}$

05. $\frac{11}{10} \times \frac{1}{22}$

06. $\frac{1}{10} \div \frac{6}{10}$

07. $\frac{3}{16} \times \frac{12}{6}$

08. $\frac{12}{13} \div \frac{7}{26}$

09. $\frac{4}{7} \times \frac{8}{15}$

10. $\frac{6}{7} \div \frac{3}{10}$

11. $\frac{11}{13} \times \frac{11}{4}$

12. $\frac{5}{12} \div \frac{1}{2}$

13. $\frac{2}{3} \times \frac{3}{10}$

14. $\frac{7}{3} \div \frac{6}{3}$

15. $\frac{7}{6} \times \frac{8}{4} \times \frac{2}{3}$

16. $\frac{12}{5} \div \frac{10}{125} \times \frac{2}{3}$

17. $\frac{12}{6} \times \frac{14}{28} \times \frac{2}{3}$

18. $\frac{14}{3} \times \frac{8}{4} \div \frac{16}{3}$

19. $\frac{17}{6} \times \frac{21}{51} \times \frac{2}{7}$

20. $\frac{1}{5} \div \frac{2}{25} \times \frac{6}{7}$

21. $\frac{1}{5} \times \frac{1}{6} \times \frac{1}{3}$

22. $\frac{13}{2} \times \frac{26}{12} \div \frac{13}{3}$

23. $\frac{3}{16} \times \frac{18}{6} \times \frac{12}{14}$

24. $\frac{5}{8} \div \frac{50}{48} \times \frac{10}{24}$

17 Basic percentages and conversions

01. 280 න් 75%

02. 25% භාගයක් ලෙස ලියන්න

03. 0.62 ප්‍රතිශතයක් ලෙස ලියන්න

04. $\frac{78}{200}$ ප්‍රතිශතයක් ලෙස ලියන්න

05. 700 න් 25%

06. 20% භාගයක් ලෙස ලියන්න

07. 0.12 ප්‍රතිශතයක් ලෙස ලියන්න

08. $\frac{41}{100}$ ප්‍රතිශතයක් ලෙස ලියන්න

09. 380 න් 20%

10. 25% භාගයක් ලෙස ලියන්න

11. 0.12 ප්‍රතිශතයක් ලෙස ලියන්න

12. $\frac{59}{100}$ ප්‍රතිශතයක් ලෙස ලියන්න

13. 520 න් 75%

14. 75% භාගයක් ලෙස ලියන්න

15. 0.12 ප්‍රතිශතයක් ලෙස ලියන්න

16. $\frac{46}{100}$ ප්‍රතිශතයක් ලෙස ලියන්න

17. 300 න් 5%

18. 12% භාගයක් ලෙස ලියන්න

19. 0.12 ප්‍රතිශතයක් ලෙස ලියන්න

20. $\frac{40}{200}$ ප්‍රතිශතයක් ලෙස ලියන්න

21. 420 න් 20%

22. 45% භාගයක් ලෙස ලියන්න

23. 0.12 ප්‍රතිශතයක් ලෙස ලියන්න

24. $\frac{15}{40}$ ප්‍රතිශතයක් ලෙස ලියන්න

18 Powers, squares and signed powers

සුළු කරන්න.

01. 4^2

02. $(-4)^2$

03. $2^2 + 4^2$

04. -5^3

05. 2^4

06. $(-6)^3$

07. $5^2 + 5^3$

08. $2^3 - 3^2$

09. 2^5

10. $(-3)^3$

11. $2^2 + 5^2$

12. $4^3 - 5^2$

13. 8^2

14. $(-4)^4$

15. $6^2 - 2^2$

16. $4^3 - 4^2$

17. 15^2

18. -3^5

19. $4^2 + 4^2$

20. $4^3 - 2^3$

21. 12^2

22. 3^3

23. 14^2

24. -13^2

19 Collecting like terms: x only

සුළු කරන්න.

01. $-x-3x$

02. $-3x+4x$

03. $3x-7x+6x$

04. $-5x-2x-x+10x$

05. $6x-3x$

06. $11x-x-3x$

07. $10x-2x+x-6x$

08. $-x+2x$

09. $10x+2x+4x$

10. $-10x+x-10x+11x$

11. $11x+3x$

12. $-10x+x$

13. $19x+12x-2x$

14. $-2x+6x-5x$

15. $-6x+9x+4x$

16. $13x-21x+x$

17. $13x+16x$

18. $15x+2x-13x$

19. $8x+x$

20. $6x-6x-x$

21. $6x-9x+x$

22. $x-2x$

23. $5x-3x-2x$

24. $-x-3x-2x$

25. $9x+11x-20x$

26. $3x-5x-x$

27. $-15x+12x$

28. $13x-10x$

29. $-12x+5x-3x$

30. $-15x+4x+3x$

20 Like terms with constants

සුළු කරන්න.

01. $-2x + 1 + 5x$

02. $x + 2 - 8x - 7$

03. $-9x - 5 + 6x - 6 + 8x$

04. $x - 9 + 9x + 2$

05. $2x - 7x + 6 + 7$

06. $x - 7 - 6x - 8$

07. $2x - 3 - 5x + 3x - 7$

08. $2x - 3 + 7x - 4$

09. $3x + 9 + 5x + 7 + 3x$

10. $8x + 1 - 7x + 1$

11. $5x - 6 - 6x - 2x - 2$

12. $6 + 7x - 4 - 2x$

13. $4x - 4 + 4x + 5 - 7x$

14. $-5x - 8 - 6x - 4$

15. $6x - 1 - 9x$

16. $-3x + 21x + 9$

17. $1 - 5x + 9 - 9x$

18. $9x + 7 - 8x - 6$

19. $-8x + 6 + 2x - 7$

20. $-9x + 9 - 9x - 6$

21. $3x - 5x + 5 - 9$

22. $-3x + 8 - 1 + 7x$

23. $4x + 7 + 4x - 9$

24. $8x + 7 - 4x$

25. $9x - 5 + 5x$

26. $3 - 5x - 2$

27. $-15 + 12 + 3x - 5x$

28. $6x - 3 - x - 1$

29. $3x - 7 + 9x + 3 - 5x$

30. $-4x + 7 - 8$

21 Collecting x terms, y terms, and constants

සුළු කරන්න.

01. $8x - 4y - 4x - 2y$

02. $7x + 8y + 3x - 8y - 8$

03. $-x + 5y - 8x + 5y + 7x - 7y$

04. $x - 8y - 4x + 4y$

05. $-7x - y + 3x - 7y + 1$

06. $3x + y + 5x - y - 6x + 7y$

07. $-x + 7y + 7x + 6y$

08. $-4x - 5y + 3x + 5y + 4$

09. $3x + y + 2x + 8y + 4x - 6y$

10. $-3x - 8y + 8x - 5y$

11. $-3x - 7y + 4x + 3y - 8$

12. $6x - y + 3x - 3y - 6x - 3y$

13. $4x + 2y + 4x - 8y$

14. $4x + 5y + 4x + 4y + 7$

15. $4x - 4y + 6x - 6y + 7x + 3y$

16. $3x - 5y - 8x + 5y$

17. $1 - 2x - 3y - x + 2y - 3$

18. $-4x + y - 3x - 7y - 8x + 7y$

19. $-3x - 2y + x - 7y$

20. $-5x + y + 4x - 7y - 3$

21. $-6x + 4y + 7x - 5y + 8x + 7y$

22. $8x - 7y + 5x + 3y$

23. $-7x - 3y - x + 3y - 6$

24. $-3x + 4y - 6x + 4y + x + 2y$

22 Multiplying and dividing algebraic terms

සුළු කරන්න.

01. $4x \times (-4)$

02. $8 \times 8x$

03. $-9x \times 8x$

04. $72x \div (-8)$

05. $-3x \times (-8)$

06. $(-7) \times -x$

07. $6x \times -4x$

08. $-8x \div 8$

09. $-8x \times (-1)$

10. $(-6) \times -3x$

11. $-5x \times -7x$

12. $\frac{30x}{(-5)}$

13. $6x \times 8$

14. $(-6) \times -7x$

15. $6x \times -6x$

16. $6x \div (-6)$

17. $6x \times 5$

18. $(-2) \times 8x$

19. $-6x \times 5x$

20. $16x \div 4$

21. $7x \times 8$

22. $4 \times -8x$

23. $-3x \times -3x$

24. $-4x \div 4$

23 Expanding one bracket

සුළු කරන්න.

01. $(-1)(x+2)$

02. $6(-2x+5)$

03. $3(x-4)$

04. $(-6)(x+9)$

05. $(-7)(3x-3)$

06. $6(x-3)$

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

08. $(-6)(2x+4)$

09. $5(x-7)$

10. $4(x+1)$

11. $(-2)(x+9)$

12. $4(x-4)$

13. $(-3)(x+6)$

14. $(-5)(x+10)$

15. $(-3)(x-7)$

16. $7(x+8)$

17. $7(5x+4)$

18. $5(x-9)$

19. $3(x+9)$

20. $6(3x+1)$

21. $(-3)(x-2)$

22. $7(x+5)$

23. $(-2)(-3x-3)$

24. $2(x-4)$

24 Minus signs outside brackets

සුළු කරන්න.

01. $-(10x + 7)$

02. $7x - (10x - 8)$

03. $-9(x - 6)$

04. $5x - (-2x + 3)$

05. $-(3x + 7)$

06. $x - (9x - 2)$

07. $-9(x - 4)$

08. $7x - (-5x + 5)$

09. $-(6x + 2)$

10. $8x - (10x - 1)$

11. $-4(x - 3)$

12. $x - (-4x + 6)$

13. $-(11x + 4)$

14. $5x - (4x - 3)$

15. $-10(x - 3)$

16. $2x - (-10x + 3)$

17. $-(7x + 3)$

18. $4x - (6x - 7)$

19. $-3(x - 8)$

20. $5x - (-7x + 7)$

21. $-(4x + 2)$

22. $5x - (3x - 6)$

23. $-1(x - 4)$

24. $2x - (-2x + 1)$

25 Expanding and combining two brackets

සුළු කරන්න.

01. $2(x + 2) - 3(x - 1)$

02. $7(x + 8) + 8(x + 6)$

03. $4(x - 7) - 5(x - 9)$

04. $6(x - 6) + 8(x - 2)$

05. $5(x + 1) - 3(x + 5)$

06. $4(x - 9) + 4(x + 6)$

07. $5(x - 4) - 6(x - 8)$

08. $5(x + 7) + 2(x - 4)$

09. $8(x + 9) - 3(x - 4)$

10. $3(x + 6) + 3(x - 4)$

11. $2(x + 9) - 6(x - 1)$

12. $6(x + 3) + 6(x + 4)$

13. $2(x - 9) - 2(x - 7)$

14. $3(x - 3) + 6(x - 2)$

15. $4(x) - 4(x + 2)$

16. $2(x + 9) + 2(x - 8)$

17. $3(x) - 2(x - 8)$

18. $4(x + 9) + 8(x + 2)$

19. $4(x - 8) - 6(x + 7)$

20. $8(x + 4) + 6(x + 7)$

21. $8(x + 7) - 7(x + 5)$

22. $8(x - 2) + 2(x)$

23. $6(x + 6) - 4(x + 2)$

24. $4(x - 5) + 2(x + 9)$

25. $3(x - 2) - 7(x - 8)$

26. $5(x - 1) + 2(x + 5)$

27. $2(x - 6) - 6(x - 3)$

28. $6(x - 3) + 2(x - 2)$

29. $8(x - 2) - 4(x + 9)$

30. $4(x) + 3(x - 1)$

26 Brackets with extra terms

සුළු කරන්න.

01. $3(x - 2) + 5$

02. $6(x) + 10$

03. $2x - 2(x + 6) - 12$

04. $3(x - 8) + 2x$

05. $3(x - 9) + 12$

06. $2x - 2(x - 1) + 2$

07. $3(x - 3) + 2x$

08. $4(x - 2) + 4$

09. $4x - 2(x + 10) + 12$

10. $3(x + 3) + 2x$

11. $4(x + 1) - 6$

12. $3x - 2(x - 7) + 2$

13. $2(x + 5) + x$

14. $5(x + 1) - 12$

15. $8x - 2(x - 5) + 4$

16. $5(x + 3) + 4x$

17. $4(x + 5) + 2$

18. $4x - 2(x + 6) + 3$

19. $7(x + 10) + 6x$

20. $7(x - 10) + 4$

21. $7x - 2(x + 5) - 5$

22. $4(x + 10) + 3x$

23. $4(x - 6) - 4$

24. $6x - 2(x - 2) - 6$

25. $3x - 2(x - 5) - 7$

26. $5x + 2(x + 5)$

27. $1 - 4(2x - 3)$

28. $3(2x - 5) + 2$

29. $8(2 - 2x) - 4x + 9$

30. $4(2x - 1) + 3)$

27 Substituting values into expressions

ආදේශ කර අගය සොයන්න.

01. $4x + 5 \; ; x = -4$

02. $x^2 - 9 \; ; x = 7$

03. $6x - 5y \; ; x = 6, y = -4$

04. $2(x - y) + 6 \; ; x = -2, y = 5$

05. $5x + 7 \; ; x = -4$

06. $x^2 - 5 \; ; x = -1$

07. $2x - 7y \; ; x = 2, y = 1$

08. $2(x - y) + 9 \; ; x = 1, y = 2$

09. $5x + 4 \; ; x = 1$

10. $x^2 - 1 \; ; x = 6$

11. $6x - 9y \; ; x = -4, y = 7$

12. $2(x - y) + 4 \; ; x = 5, y = 6$

13. $2x + 3 \; ; x = 2$

14. $9 - x^2 \; ; x = 4$

15. $7x + 6y \; ; x = 8, y = 5$

16. $2(x - y) + 7 \; ; x = 0, y = 3$

17. $4 + 2x \; ; x = -2$

18. $x^2 - 3 \; ; x = 4$

19. $6x - y \; ; x = 8, y = 0$

20. $2(x - y) + 5 \; ; x = -6, y = 3$

28 Solving one-step equations

පහත සමීකරණ විසඳන්න.

01. $x + 6 = 0$

02. $x - 2 = 1$

03. $7x = -49$

04. $\frac{x}{15} = 0.6$

05. $x + 10 = 6$

06. $x - 10 = -5$

07. $10x = 120$

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

09. $x + 8 = 12$

10. $x - 6 = -4$

11. $5x = -5$

12. $\frac{x}{8} = 0.25$

13. $x + 3 = -5$

14. $x - 3 = 6$

15. $5x = -65$

16. $\frac{x}{14} = -\frac{6}{7}$

17. $x + 9 = 8$

18. $x - 11 = -13$

19. $2x = 22$

20. $\frac{x}{13} = \frac{10}{13}$

21. $x + 3 = -1$

22. $x - 6 = -17$

23. $7x = 35$

24. $\frac{x}{8} = 1$

29 Solving two-step equations

පහත සමීකරණ විසඳන්න.

01. $9x + 4 = -32$

02. $5x - 8 = -23$

03. $\frac{x+15}{8} = 0.375$

04. $6x + 2 = 2$

05. $5x - 10 = 10$

06. $\frac{x+3}{2} = -2$

07. $9x + 1 = -8$

08. $10x - 14 = -44$

09. $\frac{x+1}{8} = 0.5$

10. $2x + 4 = 8$

11. $8x - 2 = -42$

12. $\frac{x+10}{9} = \frac{14}{9}$

13. $5x + 12 = 72$

14. $4x - 13 = -17$

15. $\frac{x+10}{9} = \frac{2}{9}$

16. $3x + 8 = -19$

17. $4x - 3 = -47$

18. $\frac{x+4}{8} = -0.25$

19. $10x + 7 = 57$

20. $2x - 5 = 19$

21. $\frac{x+4}{9} = \frac{5}{3}$

22. $9x + 6 = 42$

23. $5x - 9 = 21$

24. $\frac{x+10}{3} = \frac{14}{3}$

30 Equations with brackets and x on both sides

පහත සමීකරණ විසඳන්න.

01. $4(x + 7) = 2x + 26$

02. $8(x + 8) = 6x + 88$

03. $6(x - 7) = 4x - 34$

04. $2(x - 7) = 3x - 13$

05. $4(x + 4) = 5x + 24$

06. $5(x - 8) = 4x - 38$

07. $4(x + 5) = 5x + 26$

08. $3(x + 6) = 6x + 3$

09. $5(x + 5) = 6x + 28$

10. $7(x + 2) = 3x + 18$

11. $2(x - 2) = 3x$

12. $4(x - 4) = x - 40$

13. $7(x - 6) = 4x - 54$

14. $8(x + 3) = 4x + 36$

15. $6(x + 3) = 4x + 38$

16. $7(x - 4) = 3x - 28$

17. $4(x - 6) = x - 21$

18. $7(x + 6) = 4x + 60$

19. $6(x - 7) = 4x - 32$

20. $5(x - 3) = 4x - 23$

21. $7(x - 3) = 2x + 9$

22. $6(x + 4) = 7x + 29$

23. $2(x - 8) = 3x - 9$

24. $7(x + 7) = 5x + 71$

31 Equations with brackets and x on both sides

පොදු සාධක වෙන් කරන්න.

01. $49x + 56$

02. $66x^2 - 121x$

03. $54xy - 63x$

04. $27x + 18$

05. $90x^2 - 10x$

06. $21xy - 28x$

07. $40x + 8$

08. $56x^2 - 63x$

09. $10xy + 45x$

10. $60x + 70$

11. $14x^2 - 63x$

12. $81xy + 18x$

13. $6x - 66$

14. $66x^2 + 55x$

15. $12xy - 66x$

16. $20x - 48$

17. $108x^2 - 60x$

18. $14xy - 16x$

19. $72x + 63$

20. $44x^2 + 11x$

21. $24xy - 132x$

22. $15x + 9$

23. $30x^2 + 5x$

24. $45xy - 36x$

32 Multiplying two algebraic brackets

ද්විපද ප්‍රසාරණය කරන්න.

01. $(x - 5)(x - 9)$

02. $(3x + 9)(x + 6)$

03. $(x + 5)^2$

04. $(x - 4)(x - 3)$

05. $(3x - 7)(x + 5)$

06. $(x - 8)^2$

07. $(x - 1)(x - 3)$

08. $(4x + 9)(x + 5)$

09. $(x + 4)^2$

10. $(x + 2)(x - 8)$

11. $(3x - 5)(x - 3)$

12. $(x - 4)^2$

13. $(x + 6)(x + 8)$

14. $(2x + 4)(x + 6)$

15. $(x - 7)^2$

16. $(x - 6)(x + 1)$

17. $(3x + 5)(x + 8)$

18. $(x - 5)^2$

19. $(x - 6)(x + 2)$

20. $(4x + 3)(x - 8)$

33 Simple Algebraic Fractions

පහත වීජීය භාග සුළු කරන්න.

01. $\frac{16x}{48}$

02. $\left(\frac{4x}{12}\right) + \left(\frac{9x}{12}\right)$

03. $\left(\frac{5x}{15}\right) - \left(\frac{8x}{15}\right)$

04. $\left(\frac{x}{5}\right) + \left(\frac{x}{8}\right)$

05. $\frac{84x}{54}$

06. $\left(\frac{2x}{3}\right) + \left(\frac{5x}{3}\right)$

07. $\left(\frac{12x}{3}\right) - \left(\frac{1x}{3}\right)$

08. $\left(\frac{x}{13}\right) + \left(\frac{x}{4}\right)$

09. $\frac{154x}{99}$

10. $\left(\frac{8x}{11}\right) + \left(\frac{3x}{11}\right)$

11. $\left(\frac{2x}{8}\right) - \left(\frac{6x}{8}\right)$

12. $\left(\frac{x}{3}\right) + \left(\frac{x}{9}\right)$

13. $\frac{33x}{12}$

14. $\left(\frac{4x}{11}\right) + \left(\frac{6x}{11}\right)$

15. $\left(\frac{7x}{12}\right) - \left(\frac{7x}{12}\right)$

16. $\left(\frac{x}{2}\right) + \left(\frac{x}{5}\right)$

17. $\frac{27x}{3}$

18. $\left(\frac{7x}{2}\right) + \left(\frac{1x}{2}\right)$

19. $\left(\frac{11x}{15}\right) - \left(\frac{1x}{15}\right)$

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

34 Laws of indices in algebra

දර්ශක නීති භාවිතයෙන් සුළු කරන්න.

01. $x^8 \times x^5$

02. $x^6 \div x^4$

03. $(x^6)^6$

04. $3x^6 \times 5x^2$

05. $x^4 \times x^2$

06. $x^{12} \div x^8$

07. $(x^8)^4$

08. $4x^2 \times 3x^2$

09. $x^4 \times x^3$

10. $x^{13} \div x^8$

11. $(x^3)^3$

12. $3x^2 \times 4x^2$

13. $x^4 \times x^5$

14. $x^9 \div x^3$

15. $(x^7)^3$

16. $3x^3 \times 2x^2$

17. $x^7 \times x^2$

18. $x^8 \div x^2$

19. $(x^4)^3$

20. $7x^6 \times 3x^2$

35 Mixed mastery challenge

01. $173 + 102$

02. $\left(\frac{3}{2}\right) - \left(\frac{4}{15}\right)$

03. $5x = 65$

04. 14×10

05. $-x - 7 - 7x - 3$

06. $\left(\frac{11x}{13}\right) + \left(\frac{7x}{13}\right)$

07. 1.05×7

08. $8(x - 8) - 4(x - 9)$

09. $35 - 13$

10. 62.5×20

11. $6(x + 8) = x + 88$

12. 51×15

13. $4x \times 5$

14. $2(x + 5) - (x - 3)$

15. $\frac{51}{72}$

16. $\frac{5}{8} + \frac{1}{4}$

17. $11 \times (3 - 5) + 5$

18. $9x - x + 12x + 9x$

19. $(x - 3)(x - 6)$

20. $222 \div 16$

21. $7x - 5 = 23$

22. $\frac{x}{3} + 4 = 10$

23. $1.8 \div 100$

24. $448 \div 16$

25. 250 හි 18%

26. $3x + 7 = 28$

27. $5(x - 2) = 35$

28. $(-2)^3 + 4^2$

29. $75 \div (3 \times 5) + 8$

30. $5 - [3 - (-7)]$

31. 13.5×40

32. $3x^2 + 5x - 2x^2 - 9x$

33. $3.6 \div 0.09$

34. $7a - 2(3a - 4) + a$

35. $\frac{5}{6} \div \frac{10}{9}$

36. $7x + 4 = 3x - 20$

37. $2(4x - 1) - 3(x + 5) = 8$

38. 1.375×80

39. $5(x - 4) = 2(x + 7)$

40. $\frac{3x+1}{4} = \frac{x+5}{2}$

41. $(2x - 3)(x + 5)$

42. $0.75 \times 240 - 18 \times 5$

43. $1.008 \times 1000 \div 4$

44. $525 \div 0.75$

45. $5(2x - 3) - 2(3x + 4) + 7$

46. $-72 \div (-8) - 5 \times (-3)$

47. 0.0625×800

48. $2x(3x - 4) - x(x + 5)$

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

50. $\frac{3x+2}{5} - \frac{x-1}{2} = \frac{11}{10}$


"Dream big, work hard, and let your knowledge shine."
Nipuna Sameera
BIT
(Bachelor Of IT)
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