



## Section A

- |                               |                                   |                              |                                    |                                 |                                   |
|-------------------------------|-----------------------------------|------------------------------|------------------------------------|---------------------------------|-----------------------------------|
| 1) $\frac{2x+5}{3} = 11$      | <b>14</b>                         | 5) $8x + \frac{1-4x}{8} = 7$ | <b><math>\frac{11}{12}</math></b>  | 9) $2 + \frac{4x}{3} - 7 = 1$   | <b><math>\frac{9}{2}</math></b>   |
| 2) $\frac{8-3x}{2} = 5$       | <b><math>-\frac{2}{3}</math></b>  | 6) $\frac{5}{x} = -6$        | <b><math>-\frac{5}{6}</math></b>   | 10) $4 - \frac{3x}{2} = 3x + 5$ | <b><math>-\frac{2}{9}</math></b>  |
| 3) $\frac{5-9x}{6} = -2$      | <b><math>\frac{17}{9}</math></b>  | 7) $\frac{11}{4x} + 9 = 3$   | <b><math>-\frac{11}{24}</math></b> | 11) $6 - \frac{2}{x} = 10$      | <b><math>-\frac{1}{2}</math></b>  |
| 4) $\frac{7x+6}{3} - 9 = -12$ | <b><math>-\frac{15}{7}</math></b> | 8) $5 - \frac{3x}{4} = 8x$   | <b><math>\frac{4}{7}</math></b>    | 12) $4 - \frac{2x}{9} + x = -1$ | <b><math>-\frac{45}{7}</math></b> |

## Section B

- |                             |                                    |                                      |                                   |
|-----------------------------|------------------------------------|--------------------------------------|-----------------------------------|
| 1) $4(2x - 3) = 8(2x + 5)$  | <b><math>-\frac{12}{2}</math></b>  | 7) $7(4 - 3x) = 2(8x - 9) + 6$       | <b><math>\frac{40}{37}</math></b> |
| 2) $3(4x - 5) = 5(2x - 5)$  | <b>-5</b>                          | 8) $-6(3 - 4x) + 2x = 8(x + 11)$     | <b><math>\frac{53}{9}</math></b>  |
| 3) $8(6x + 2) = 5(x - 2)$   | <b><math>-\frac{26}{43}</math></b> | 9) $3(2x - 6) = 3 - 4(3 - x)$        | <b><math>\frac{9}{2}</math></b>   |
| 4) $2(3x - 4) = 7(11 - 2x)$ | <b><math>\frac{17}{4}</math></b>   | 10) $9(2x - 1) - 3x = 3(12 + x)$     | <b><math>\frac{5}{2}</math></b>   |
| 5) $7(5 - x) = -4(x - 11)$  | <b>-3</b>                          | 11) $4x - (2x - 8) = 5(1 + 2x)$      | <b><math>\frac{3}{8}</math></b>   |
| 6) $-4(x - 8) = -6(4 + 3x)$ | <b>-4</b>                          | 12) $10 - 6(8x - 2) = 9x - (3 + 4x)$ | <b><math>\frac{25}{53}</math></b> |

## Section C

- |   |                                    |  |                                    |
|---|------------------------------------|--|------------------------------------|
| 1) $\frac{5x-2}{3} = \frac{4x+1}{2}$        | <b><math>-\frac{7}{2}</math></b>   | 8) $\frac{1}{2}(5x+7) = \frac{3}{4}(3x-1)$ | <b>-17</b>                         |
| 2) $\frac{7x-8}{5} = \frac{2x+5}{4}$        | <b><math>\frac{19}{6}</math></b>   | 9) $\frac{5}{3x+1} = 12$                   | <b><math>-\frac{7}{36}</math></b>  |
| 3) $\frac{-8x-1}{2} = \frac{5-3x}{6}$       | <b><math>-\frac{8}{21}</math></b>  | 10) $\frac{x+2}{x+3} = 4$                  | <b><math>-\frac{10}{3}</math></b>  |
| 4) $\frac{5(x+11)}{3} = \frac{3(1+x)}{2}$   | <b>-101</b>                        | 11) $\frac{2x-9}{3x-2} = -3$               | <b><math>\frac{15}{11}</math></b>  |
| 5) $\frac{3(2+5x)}{4} = \frac{2(6x-3)}{5}$  | <b>-2</b>                          | 12) $\frac{2}{3x+10} = \frac{1}{x-1}$      | <b>-12</b>                         |
| 6) $\frac{2(3x-5)}{3} = \frac{-4(x-2)}{7}$  | <b><math>-\frac{13}{27}</math></b> | 13) $\frac{2}{7x+3} = \frac{9}{2x-5}$      | <b><math>-\frac{37}{59}</math></b> |
| 7) $\frac{1}{2}(2x-6) = \frac{1}{4}(8-12x)$ | <b><math>\frac{5}{4}</math></b>    | 14) $\frac{8}{6x+12} = -\frac{11}{7x-10}$  | <b><math>-\frac{26}{61}</math></b> |

Hint: Leave your answers as simplified fractions or as decimals.