## L6

# **Solving Linear Equations (C)**

Grade DProgression: Medium

Solve the following equations. Some questions will have negative, fraction or decimal answers.

### Section A

1) 
$$4x+10=30$$

$$x + 10 = 30$$

2) 
$$4x-8=20$$
  
3)  $5+2x=65$ 

4) 
$$9+4x=-15$$

5) 
$$14+6x=2$$

5) 
$$14+6x=2$$

6) 
$$2x-3=-2$$

7) 
$$5+10x=-15$$

8) 
$$10 = 7 - x$$

9) 
$$-3=16-x$$

10) 
$$-4 = 12 - 2x$$

11) 
$$25 = 46 - 3x$$

12) 
$$8 = 9 - 5x$$

#### Section B

1) 
$$\frac{x}{2} + 11 = 19$$
 4)  $3 = \frac{x}{4} - 3$  7)  $-1 = 6 + \frac{x}{2}$ 

$$\frac{2}{2} + 11 = 19$$

2) 
$$\frac{x}{7} - 6 = 1$$

3) 
$$12 + \frac{x}{5} = 20$$
 6)  $-2 = \frac{x}{8} - 5$ 

4) 
$$3 = \frac{x}{4} - 3$$

5) 
$$7 = \frac{x}{2} - 4$$

6) 
$$-2 = \frac{x}{2} - 5$$

7) 
$$-1=6+\frac{x}{2}$$

5) 
$$7 = \frac{x}{2} - 4$$
 8)  $14 - \frac{x}{3} = 10$ 

8) 
$$14 - \frac{1}{3} = 10$$

10) 
$$\frac{x+5}{3} = 12$$

11) 
$$\frac{x-4}{11} = 9$$

9) 
$$5 - \frac{x}{9} = -1$$

12) 
$$\frac{x+3}{8} = -2$$

#### Section C

1) 
$$3(x+2)=15$$

2) 
$$2(x+5)=24$$

3) 
$$6(x-9)=12$$

4) 
$$2(3x+5) = -44$$

5) 
$$5(4x-3)=11$$

6) 
$$-3(2x+1)=21$$

7) 
$$-9(x-4)=54$$

8) 
$$7(x-4)-3=46$$

9) 
$$2(3x-1)+3=21$$

10) 
$$2(x+1)+3x=37$$

11) 
$$12+4(2x+4)=68$$

12) 
$$3x-2(6x-3)=42$$

#### Section D

1) 
$$x + 8 = 3x$$

2) 
$$6 + x = 2x$$

3) 
$$10 + x = 6x$$

4) 
$$3x-24=5x$$

5) 
$$4x+7=6x$$

6) 
$$9x+13=7x$$

7) 
$$12x-5=7x$$

8) 
$$1-2x=8x$$

9) 
$$2-4x=6x$$

10) 
$$4(x+3)=7x$$

11) 
$$5(2x-1)=16x$$

12) 
$$3(6x+4)=2x$$

#### Section E

1) 
$$9x+2=4x+12$$

2) 
$$5x + 4 = 31 + 2x$$

3) 
$$8x+3=12+3x$$

4) 
$$6+9x=20+2x$$

5) 
$$7 + x = 13 + 4x$$

6) 
$$5x-3=2x+6$$

7) 11x-6=3x+18

8) 
$$2x-8=6x+4$$

9) 
$$4x-21=6x-3$$

10) 
$$x-3=7x+1$$

11) 
$$9x-5=7-4x$$

12) 
$$-8x+4=-26x+1$$