1.

a)
$$3x + 5 = 23$$

b)
$$8x - 12 = 28$$

c)
$$10y + 23 = 3$$

d)
$$11 - 5z = 26$$

e)
$$4z - 9 = -2$$

2.

a)
$$7x + 3 = 5x + 12$$

b)
$$6z + 8 = 11z - 7$$

c)
$$9y + 4 = 3y - 10$$

d)
$$100 - 7x = 13x$$

e)
$$0.9x + 5 = 1.2x - 3.4$$

f)
$$4.2t - 7 = 11 - 3.3t$$

3.

a)
$$\frac{2x}{3} + 2 = 10$$

b)
$$\frac{3x}{5} - 5 = 7$$

c)
$$\frac{x}{2} + \frac{x}{3} = 25$$

4.

a)
$$3(x + 7) = 4(2x - 1)$$

b)
$$4(5x - 3) + 6 = 10$$

c)
$$8(y + 10) - 30 = 5y$$

d)
$$9(y-5) = 4y-10$$

e)
$$3(6v + 4) = 9(2v - 3)$$

f)
$$8(3 + 2z) - 3z = 5z - 8$$

5.

a)
$$\frac{3y+5}{2} = \frac{2y}{3}$$

b)
$$\frac{x+5}{3} = \frac{3x}{4}$$

c)
$$\frac{2x-5}{2} = \frac{4x-9}{5}$$

d)
$$\frac{4x+30}{6} = \frac{9-x}{4}$$

e)
$$\frac{2z+7}{5} = \frac{9-3z}{6}$$

6.

a)
$$2x(x-3) = x(2x+4) - 80$$

b)
$$x(x + 3) = x^2 + 4(x - 3)$$

c)
$$(z-2)(z+3) = z^2+6$$

d)
$$(y + 3)(y + 5) = y(y + 11)$$

e)
$$(x-1)(x+1) = (x+3)(x-2)$$

7.

a)
$$(y + 2)(y - 8) = (y - 2)^2 - 12$$

b)
$$(x-1)^2 = (x-3)(x+2)$$

c)
$$(x + 5)^2 = (x - 3)^2 + 8x$$

d)
$$(x-2)(x+2) = (x+6)^2$$

e)
$$(3z - 1)^2 = (3z + 4)(3z - 5)$$

8.

a)
$$u = 2r\pi$$

b)
$$A = \frac{a \cdot b}{2}$$

c)
$$s = \frac{a+b+c}{2}$$

e)
$$V = \frac{a^2 \cdot h}{3}$$

f)
$$A = r^2\pi + r\pi s$$

g)
$$A = \frac{(a+c)\cdot h}{2}$$

Lös.: a) 6 b) 5 c) -2 d) -3

a) -3

b) 4

c) ⁷/₂

d) -3

e) 1/9

d) 5 e) 7/4 e) 28 f) ¹/₃

f) 2,4

a) 8

b) 12

c) 12

d) 5

e) 5

a) 9/2

b) 3

c) $-7/_3$

a) 12

b) 20

c) 30

a) -4 b) 7 c) -2

c) a = 2s - b - c d) -10/₃ e) 7

a) 5

b) 4/5

d) 7

f) -4

a) $r = \frac{u}{2\pi}$

b) $b = \frac{2A}{5}$

c) $-\frac{50}{3}$

e) $L = \{ \}$