Equations – Questions

Q1) Solve the following linear equations.

a) $3x = 20 - x$

b) $t + 3 = 5 - t$

c) $3 + 5s = 2s + 13$

d) $5a - 4 = 3a + 6$

e) $3m + 8 = -2m$

f) $6y - 11 = 2y + 5$

Q2) Solve the following linear equations by expanding the bracket.

a) $2(4t + 5) = 34$

b) $2(x + 3) - 5 = 9$

c) $3r - 7(1 + r) = 12$

d) $z(z + 2) = z^2 + 6$

Q3) Solve the following linear equations by removing the fraction.

a) $\frac{x+1}{4} = 5$

b) $\frac{x}{2} + \frac{x}{4} = 1$

c) $\frac{a-1}{2} = \frac{a+1}{4}$

d) $\frac{x+1}{2} + \frac{x-1}{3} = 4$

Q4) Solve the following linear inequations.

a) $b - 3 \geq -2$

b) $7k > 3k - 16$

c) $6m - 7 \leq m$

d) $8 + 2x > 3(4 - x)$

e) $11 - 2(4 + 3x) < 39$

f) $19 + x > 15 + 3(x - 2)$

Equations – Solutions

Q1) a) $x = 5$

b) $t = 1$

c) $s = \frac{10}{3}$

d) $a = 5$

e) $m = -\frac{8}{5}$

f) $y = 4$

Q2) a) $t = 3$

c) $r = -\frac{19}{4}$

b) $x = 4$

d) $z = 3$

Q3) a) $x = 19$

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

c) $a = 3$

d) $x = \frac{3}{5}$

Q4) a) $b \geq 1$

b) $k > -4$

c) $m \leq \frac{7}{5}$

d) $x > \frac{4}{5}$

e) $x > -6$

f) $x < 5$