Homework Questions 2 – Solving Quadratic Equations

Solve the following quadratic equations

1.
$$(x + 2)(x + 4) = 0$$

2.
$$(x-5)(x-6)=0$$

3.
$$(x-7)(x-4)=0$$

$$x =$$

4.
$$x(x + 7) = 0$$

$$x =$$

5.
$$(2x + 3)(x - 8) = 0$$

$$x =$$

6.
$$(5x - 3)(x + 5) = 0$$

Solve the following quadratic equations by factorizing first

7.
$$x^2 - 7x + 12 = 0$$

$$x^2 + 5x - 6 = 0$$

9.
$$x^2 - 2x - 15 = 0$$

10.
$$x^2 + 5x - 24 = 0$$

11.
$$x^2 + 11x + 30 = 0$$

$$x =$$

12.
$$x^2 = 88 - 3x$$

13.
$$x^2 = 6x - 8$$

$$x =$$

14.
$$7x = x^2 - 30$$

$$x =$$

15.
$$2x^2 - 3 = x$$

$$x =$$

$$16. \quad 4x^2 - 29x + 7 = 0$$

$$x =$$

17.
$$4x^2 = x$$

Solve these equations, leave your answer in surd form if necessary 18. $(3x - 2)^2 = 36$ 19. $3x^2 = 27$

18.
$$(3x-2)^2=36$$

19.
$$3x^2 = 27$$

20.
$$(x-4)^2=8$$

$$x =$$