Solving Quadratics Homework #1

For Questions #1-4. Solve each equation by factoring.

1)
$$v^2 + 5v - 24 = 0$$

$$2) \ a^2 - 9a + 18 = 0$$

3)
$$3k^2 - 8k = 3$$

4)
$$5x^2 - 7x = 6$$

For Questions #5-12. Solve each equation by taking square roots.

5)
$$v^2 - 8 = -7$$

$$6) \ 2x^2 + 10 = 142$$

7)
$$5a^2 - 1 = 214$$

8)
$$9p^2 + 1 = -80$$

9)
$$(x-5)^2-100=0$$

10)
$$(x-2)^2 - 12 = 0$$

11)
$$10(x-7)^2 = 440$$

12)
$$9(2m-3)^2 + 8 = 449$$

For Questions #13-16, Solve each equation by completing the square.

13)
$$m^2 + 20m + 91 = 0$$

14)
$$r^2 - 16r - 86 = 3$$

15)
$$2x^2 + 8x - 24 = 0$$

16)
$$10n^2 - 60 = 20n$$