

DIRECTIONS: Factor completely.

1.  $x^2 + 9x + 20$

2.  $36a^2 - 25$

3.  $3m^2 + 6m - 45$

4.  $36x^2 - 84x + 49$

5.  $5x^2 - 6x - 8$

DIRECTIONS: Simplify.

6.  $\sqrt{84}$

7.  $\sqrt{-63}$

8.  $2\sqrt{5} \cdot 8\sqrt{15}$

9.  $(10i)^2$

10.  $\sqrt{\frac{6}{11}}$

11.  $\sqrt{-6} \cdot \sqrt{-15}$

12.  $\frac{8}{7i}$

13.  $(16 + 5i) - (20 + 8i)$

14.  $3i(8 - 5i)$

15.  $(4 - 5i)(2 + 7i)$

16.  $\frac{8}{2-3i}$

DIRECTIONS: Solve.

17.  $x^2 - 3x = 18$

18.  $3x^2 + 8x - 3 = 0$

19.  $x^2 + 9 = 1$

20.  $4x^2 = 64$

21.  $5x^2 = 25x$

22.  $6x^2 + 4 = -44$

23.  $-9(x - 5)^2 = 108$