

- SHOW ALL WORK -

For 1-8, rewrite factored form as standard form.

1.  $u^2(5u - 1)(3u + 1)$

5.  $4(3u + 6)(u - 1)$

2.  $3u(4u + 3)(u + 3)$

6.  $(u^2 + 9)(u + 1)(u - 2)$

3.  $(u + 1)(u - 1)(u + 3)(u - 3)$

7.  $4(3u + 2)(u - 3)$

4.  $2v(u - 7)(u - 2)$

8.  $u^2(15u + 1)(u - 1)$

For 9-16, factor completely.

9.  $2x^2 + 22x + 36$

13.  $15u^4 + 2u^3 - u^2$

10.  $5x^3 - 10x^2 - 40x$

14.  $2u^2v - 18uv + 28v$

11.  $18x^3 - 98x$

15.  $12u^3 + 36u^2 + 27u$

12.  $ax^2 - 7ax + 12a$

16.  $x^4 + 8x^3 - 20x^2$