

HW due on 9/24/19

Date \_\_\_\_\_ Period \_\_\_\_\_

**Factor the common factor out of each expression.**

1)  $-3x^3 - 5x$

2)  $10n - 25$

3)  $-10m^5 - 15m^2$

4)  $8x^3 - 20x^6$

5)  $-2v^2 - 2$

6)  $2p + 8$

7)  $-5v + 5v^2$

8)  $4a + 16$

9)  $2x^2 + 4x$

10)  $8 + 12x^2$

**Solve each equation for the indicated variable.**

11)  $u = -\frac{2x}{3}$ , for  $x$

12)  $z = 4x + 4$ , for  $x$

13)  $z = 2a - 4$ , for  $a$

14)  $u = -4 - 4x$ , for  $x$

15)  $u = -3x - 3$ , for  $x$

16)  $g = 3 + 3a$ , for  $a$

17)  $g = -3 + 4a$ , for  $a$

18)  $u = -\frac{2a}{3}$ , for  $a$

19)  $u = 2a + 3$ , for  $a$

20)  $u = 4a$ , for  $a$

**Simplify each expression.**

21)  $(b^4 - 4b + 2b^2) - (-4b - 4b^4 - b^2)$

22)  $(3k^4 + 5 - 5k) - (-2 + 5k + 3k^4)$

23)  $(-4 - 5r - r^2) - (-5r + 3 - 4r^2)$

24)  $(m - 2 - 5m^4) - (3m + 2 + 3m^4)$