

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Per: \_\_\_\_\_

**Factor Using the GCF**

**9.4 Practice 2**

**Factor each polynomial.**

1.  $7x + 49$

2.  $8m - 6$

3.  $5a^2 - 15$

4.  $10q - 25q^2$

5.  $8ax - 56a$

6.  $81r + 48rs$

7.  $t^2h + 3t$

8.  $10m^3n^3 - 2mn^2 + 14mn$

9.  $x + x^2y + x^3y^2$

10.  $3p^2q^2 + 6pq + p$

11.  $4a^2b^2 + 16ab + 12a$

12.  $a^2b^2 + a$

**Solve each equation.**

13.  $x(x - 8) = 0$

14.  $b(b + 12) = 0$

15.  $(m - 3)(m + 5) = 0$

16.  $(a - 9)(2a + 1) = 0$

17.  $x^2 - 5x = 0$

18.  $y^2 + 3y = 0$

19.  $3a^2 = 6a$

20.  $2x^2 = 3x$

## Factor Using the GCF Worksheet 532

Factor each polynomial.

1.  $64 - 40ab$

2.  $4d^2 + 16$

3.  $6r^2s - 3rs^2$

4.  $15cd + 30c^2d^2$

5.  $32a^2 + 24b^2$

6.  $36xy^2 - 48x^2y$

7.  $30x^3y + 35x^2y^2$

8.  $9c^3d^2 - 6cd^3$

9.  $75b^2c^3 + 60bc^3$

10.  $8p^2q^2 - 24pq^3 + 16pq$

11.  $5x^3y^2 + 10x^2y + 25x$

12.  $9ax^3 + 18bx^2 + 24cx$

Solve each equation.

13.  $x(x - 32) = 0$

14.  $4b(b + 4) = 0$

15.  $(y - 3)(y + 2) = 0$

16.  $(a + 6)(3a - 7) = 0$

17.  $(2y + 5)(y - 4) = 0$

18.  $(4y + 8)(3y - 4) = 0$

19.  $2z^2 + 20z = 0$

20.  $8p^2 - 4p = 0$

21.  $9x^2 = 27x$

22.  $18x^2 = 15x$

23.  $14x^2 = -21x$

24.  $8x^2 = -26x$