

Review of GCF & Diff of 2 Squares

Solve each equation by factoring.

1) $2n^2 + 16n = 0$

2) $m^2 - m = 0$

3) $n^2 - 16 = 0$

4) $a^2 - 25 = 0$

5) $8n^2 - 24n = 0$

6) $5x^2 + 35x = 0$

7) $m^2 + 7m = 0$

8) $3x^2 - 9x = 0$

9) $4n^2 - 4 = 0$

10) $3p^2 - 75 = 0$

Review of GCF & Diff of 2 Squares

Date _____ Period _____

Solve each equation by factoring.

1) $2n^2 + 16n = 0$ GCF

$$2n(n+8) = 0$$

$$2n = 0 \quad n+8 = 0$$

$$\boxed{n=0} \quad \boxed{n=-8}$$

3) $n^2 - 16 = 0$

Difference of 2 \square 's

$$(n+4)(n-4) = 0$$

$$\downarrow \quad \downarrow$$

$$n+4=0 \quad n-4=0$$

$$\boxed{n=-4} \quad \boxed{n=4}$$

5) $8n^2 - 24n = 0$

GCF

$$8n(n-3) = 0$$

$$\downarrow \quad \downarrow$$

$$8n = 0 \quad n-3 = 0$$

$$\boxed{n=0} \quad \boxed{n=3}$$

7) $m^2 + 7m = 0$

GCF

$$m(m+7) = 0$$

$$\boxed{m=0} \quad m+7=0$$

$$\boxed{m=-7}$$

9) $4n^2 - 4 = 0$

GCF

Difference of 2 \square 's

$$4(n^2 - 1) = 0$$

$$4(n+1)(n-1) = 0$$

$$\downarrow \quad \downarrow$$

$$n+1=0 \quad n-1=0$$

$$\boxed{n=-1} \quad \boxed{n=1}$$

2) $m^2 - m = 0$ GCF

$$m(m-1) = 0$$

$$\boxed{m=0} \quad m-1=0$$

$$\boxed{m=1}$$

4) $a^2 - 25 = 0$

Difference of 2 \square 's

$$(a+5)(a-5) = 0$$

$$\downarrow \quad \downarrow$$

$$a+5=0 \quad a-5=0$$

$$\boxed{a=-5} \quad \boxed{a=5}$$

6) $5x^2 + 35x = 0$

GCF

$$5x(x+7) = 0$$

$$\downarrow \quad \downarrow$$

$$5x = 0 \quad x+7 = 0$$

$$\boxed{x=0} \quad \boxed{x=-7}$$

8) $3x^2 - 9x = 0$

GCF

$$3x(x-3) = 0$$

$$\downarrow \quad \downarrow$$

$$3x = 0 \quad x-3 = 0$$

$$\boxed{x=0} \quad \boxed{x=3}$$

10) $3p^2 - 75 = 0$

FACTOR out GCF

then diff of 2 \square 's

$$3(p^2 - 25) = 0$$

$$3(p-5)(p+5) = 0$$

$$\downarrow \quad \downarrow$$

$$p-5=0 \quad p+5=0$$

$$\boxed{p=5} \quad \boxed{p=-5}$$