

9.5a Factoring out a Monomial (GCF)

What do the following terms have in common?

a) x^2 and $15x$

b) $2x$ and $10x$

A: x

A: $2x$

Just take out the GCF!!!!

Ex1. Factor out the GCF.

$$\frac{a^2 + 5a}{a \quad a}$$

$$\boxed{a(a + 5)}$$

Answer: _____

Ex2. Factor out the GCF.

$$\frac{4x^2 - 2}{2 \quad 2}$$

$$\boxed{2(2x^2 - 1)}$$

Answer: _____

Ex3. Factor out the GCF.

$$\frac{-16t^2 + 14t}{-2t \quad -2t}$$

$$\boxed{-2t(8t - 7)}$$

Answer: _____

Ex4. Factor out the GCF.

$$\frac{12x + 24y}{12 \quad 12}$$

$$\boxed{12(x + 2y)}$$

Answer: _____

Ex5. Factor out the GCF.

$$\frac{4x^4 + 24x^3}{4x^3 \quad 4x^3}$$

$$4x^3(x+6)$$

Answer: _____

Ex6. Factor out the GCF.

$$\frac{6n^2 - 15n}{3n \quad 3n}$$

$$3n(2n-5)$$

Answer: _____

Ex7. Factor out the GCF.

$$\frac{8a^2b - 6ab^2}{2ab \quad 2ab}$$

$$2ab(4a - 3b)$$

Answer: _____

Homework: