

Warm - Up
2/22/19

Factor the polynomial completely

$$12t^2 + 8t - 20$$

$$4(3t^2 + 2t - 5)$$

↑
GCF

leftovers

$$\begin{array}{l} 12 = 3 \cdot 2 \cdot 2 \cdot + \cdot + \\ 8 = 2 \cdot 2 \cdot 2 \cdot + \\ 20 = 5 \cdot 2 \cdot 2 \cdot - \end{array}$$

GCF = 4

Quiz Deadline
Thu, Feb. 28th

Factoring a GCF that contains -1

Factor $-x^2 + 4x + 4$ completely

$$\begin{aligned} -x^2 &= -1 \cdot x \cdot x \\ -4x &= -1 \cdot 2 \cdot 2 \cdot x \\ 4 &= -1 \cdot 2 \cdot 2 \cdot -1 \end{aligned}$$

$$\text{GCF} = -1$$

$$-1(x^2) + -1(4x) + -1(-4)$$

$$-1(x^2 + 4x + -4)$$

$$-1(x^2 + 4x - 4)$$



Factor $-25a^3 + 5a^2$ completely

$$-25a^3 = (-1) \cdot 5 \cdot 5a \cdot a \cdot a \quad \text{GCF} = -5a^2$$

$$5a^2 = 1 \cdot 5 \cdot a \cdot a \cdot 1 \quad -5a^2(5a-1)$$

$$\text{GCF} = -5a^2$$

$$-25a^3 + 5a^2$$

$$5a^2(-5a+1)$$

~~$$-28x + 7x^2$$~~



Factor $-8a^3 + 4a^2 - 4a$ completely

$$\text{GCF} = -4a$$

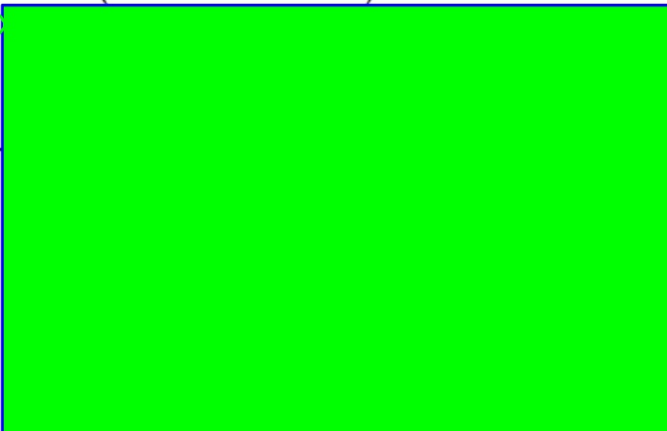
$$-8a^3 = -1 \cdot 2 \cdot 2 \cdot 2 \cdot a \cdot a \cdot a$$

$$4a^2 = -1 \cdot 2 \cdot 2 \cdot a \cdot a \cdot (-1)$$

$$-4a = -1 \cdot 2 \cdot 2 \cdot a \cdot 1$$

$$\text{GCF} = -1 \cdot 2 \cdot 2 \cdot a$$

$$= -4a$$



Assignment due Tue, Feb. 26th
p.87 (21-30)