PRACTICE **1-2** NAME\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 [SHOW YOUR WORK]

For the given polynomials determine which of the binomials listed are factors.

b.

a.

1. $f\left(x\right)=-2x^{2}+15x-7 $ 2. $f\left(x\right)=3x^{2}-7x-6$
	1. $x+1$ a. $x-3$
	2. $x-7$ b. $x+2$
	3. $x-2$ c. $x-2$
2. k

None

a., b., c.

1. $f\left(x\right)=x^{3}+3x^{2}-4x-12$ 4. $f\left(x\right)=2x^{3}+15x^{2}-22x-15$
	1. $x+2$ a. $x+3$
	2. $x-2$ b. $x+5$
	3. $x+3$ c. $x-3$

Factor the following:

1. k
2. $x^{2}+8x+16$

$$\left(x+4\right)^{2}$$

1. $ x^{2}-4x$

$$x\left(x-4\right)$$

1. $x^{2}+12x+35$

$$(x+7)\left(x+5\right)$$

1. $x^{2}+5x-14$

$$(x+7)\left(x-2\right)$$

1. $x^{2}+3x-4$

$$(x+4)\left(x-1\right)$$

1. $x^{2}+11x+24$

$$(x+8)\left(x+3\right)$$