

Name: KEY  
Date: \_\_\_\_\_

### F.2 Worksheet

#### Factor

1)  $\frac{3p}{3} + \frac{6}{3}$

$3(p+2)$

2)  $\frac{12x}{4} - \frac{8}{4}$

$4(3x-2)$

3)  $\frac{-6}{-1} - \frac{y}{-1}$

$-1(6+y)$

4)  $\frac{7x^2}{7x} - \frac{21x}{7x}$

$7x(x-3)$

5)  $\frac{-4w}{-4} - \frac{20}{-4}$

$-4(w+5)$

6)  $\frac{16a}{4} + \frac{12b}{4}$

$4(4a+3b)$

7)  $\frac{28m^2}{7m} - \frac{21mn}{7m}$

$7m(4m-3n)$

8)  $\frac{9y^2}{3} - \frac{6y}{3} + \frac{12}{3}$

$3(3y^2-2y+4)$

9)  $\frac{8x^2y}{2xy} + \frac{10xy}{2xy}$

$2xy(4x+5)$

10)  $\frac{6pqr}{6qr} - \frac{18q^2r}{6qr}$

$6qr(p-3q)$

11)  $\frac{-16m^7}{-8m^5} - \frac{24m^5}{-8m^5}$

$-8m^5(2m^2+3)$

12)  $\frac{-3x^3}{-x^3} - \frac{x^4}{-2^2}$

$-x^3(3+x)$

13)  $\frac{20c^3d^4}{5c^2d^3} - \frac{15c^2d^5}{5c^2d^3} + \frac{25c^3d^3}{5c^2d^3}$

$5c^2d^3(4cd-3d^2+5c)$

14)  $a^6b^4c^9 + a^5b^7c^5 - b^{10}c^4$

$b^4c^4(a^6c^5 + a^5b^3c - b^6)$

15)  $4x^4 - 8x^3 + 10x^2 - 2x$

$2x(2x^3 - 4x^2 + 5x - 1)$

16)  $24mn^2 + 48m^2n - 36mn$

$12mn(2n + 4m - 3)$

17)  $-70w^3 - 80w - 30w^2$

$-10w(7w^2 + 8 + 3w)$

18)  $27pq^4r + 30pq^3r^2 - 21pq^4r^2$

$3pq^3r(9q + 10r - 7qr)$