

Name: _____

Date: _____

2-6 MORE FACTORING

FLUENCY

1. Write each of the following expressions in their completely factored form. These should be moderately easy to factor.

(a) $2x^2 - 14x - 36$

(b) $5x^2 + 70x + 245$

(c) $3x^2 - 192$

(d) $6x^3 + 36x^2 - 96x$

(e) $28x - 7x^3$

(f) $8x^2 + 12x - 8$

2. Write each of the following in completely factored form. These will involve *slightly more difficult* final trinomial expressions.

(a) $15x^2 - 110x + 120$

(b) $10x^3 - 26x^2 - 12x$

3. Write each of the following in completely factored form. Note that neither has a gcf that can be first factored out.

(a) $8x^2 + 67x + 24$

(b) $12x^2 - 20x + 3$

4. Factor each of the following completely using the sum or difference of cubes.

a. $x^3 - 1$

b. $x^3 + y^3$

c. $27 - y^3$

d. $s^3 - 64$

e. $m^3 + 216$

f. $y^3 + 125$

g. $27x^3 - y^3$

h. $125x^3 + 8a^3$

i. $1000 + 27a^3$