Bellwork Alg 2A Tuesday, February 28, 2017

Factor each completely.

1. $18x^3 + 51x^2 - 42x$

2. $96gh^3 - 54g^5h$

3. $2Q^3 - 36Q^2 + 162Q$

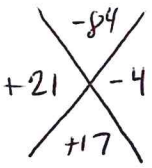
4. $9m^2 + 48m + 64$

Bellwork Alg 2A Tuesday, February 28, 2017 Answers

Factor each completely.

1. $18x^3 + 51x^2 - 42x$

$= 3x(6x^2 + 17x - 14) = 3x(2x+7)(3x-2)$



	2x	+7
3x	$6x^2$	+21x
-2	-4x	-14

2. $96gh^3 - 54g^5h$

$= 6gh(16h^2 - 9g^4)$

$= 6gh(4h \pm 3g^2)$

3. $2Q^3 - 36Q^2 + 162Q$

$= 2Q(Q^2 - 18Q + 81)$

$= 2Q(Q-9)^2$

4. $9m^2 + 48m + 64$

$= (3m+8)^2$