

Factor the following polynomial by grouping terms.

$$8ac - 2bd + bc - 16ad$$

$$8ac - 2bd + bc - 16ad = 8ac + bc - 2bd - 16ad$$

$$= c(8a + b) - 2d(b + 8a)$$

$$= c(8a + b) - 2d(8a + b)$$

$$= (8a + b)(c - 2d)$$